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Consumers
POWER
Company

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August 21, 1980

Director of Office of Inspection
and Enforcement
Att Mr Victor Stello
US Nuclear Regulatory Commission
Washington, DC 20555

MIDLAND PROJECT -
ALAB-106 MONTHLY REPORT FOR JULY 1980
DOCKET NOS 50-329 AND 50-330
FILE: 0.4.6 UFI: 70*01 SERIAL: 8816

In accordance with Condition of Memorandum and Order ALAB-106, dated March 26, 1973, and Amendment No 1 of the Midland Plant Construction Permit, enclosed are ten copies of the following documents written or closed during the month: Bechtel Nonconformance Reports; sheets from the Bechtel Nonconformance Report Log; Bechtel Quality Action Requests; Babcock & Wilcox Reports of Nonconformity; B&W ISI NCR's; and Consumers Power Company Nonconformance Reports, Audit Finding Reports and Corrective Action Reports.

James W. Cook

WRB/lr

CC: JGKepler, USNRC Region III (w/enc)

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LOG SHEETS

LOG OF NONCONFORMANCE REPORTS



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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1105	12-13-77 P/M	Valve Manual operating handle broken off, rendering the valve in-operative.	Rework	7-27-78	L. Brown
1106	12-13-77	C-231. Concrete Temp, not maintained during cure. SW Line Elev. 585.5± to 590.5±	Use as is	Telex 12-22-77 1-10-78	D. L. Osborn S. Kirker
1107	12-13-77	C-230. High air entrainment on Pour A(687)c Slab #8	Use as is	Telex. 12-20-77 1-6-78	S. Kirker B. T. Cheek
1108	12-13-77	C-208. Cement users test #61 had a recorded result on loss of ignition of 3.6% (max. of 3.0% allowed)	Use as is	4-12-78	T. Lieb
1109	12-13-77	C-208. Flyash sampled on 11/4/77 had a specific gravity variation of 5.9% exceeding specified max.by.9%	Use as is	2-9-78	T. Lieb
1110	12-14-77	G-27. Dwg.-652. Beams 217B1 and 217B2 welded with no evidence of welding filler metal control.	Use As Is	2-10-78	J. C. Huron
1111	12-14-77	M-305. Heat code stamped on mat'l does not compare with heat number on Certified MTR.	Doc. Rework	2-3-78	R. Montreuil
1112	12-15-77	F-24898. Beams received without heat number traceability.	Reject	12-21-77	D. E. Duff
1113	12-15-77	M-204. Flued heads without covers. Cont. #1 Az-47	Rework	1-12-78	C. Groat
1114	12-15-77	M-204. Piping materials stored improperly, Laydown areas.	Rework Repair	6-7-78	C. Groat
1115	12-16-77	Dwg. 617 Sht.6. Valve rigged to spool piece placing strain on spool weld making quality of pipe indeterminate.	No Non-con	1-21-78	H. D. Foster
1116	12-15-77	M-12500. Valve ID on tag does not compare with Valve ID on Quality Verification Documentation.	Use as is	1-25-78	D. A. Delaney
1117	12-15-77	M-106. Shop Welds on hangers received for EME 853 & 958 are oversized.	Use as is	3-2-78	D. Duff
1118	12-15-77 P/M	M-157. Nameplates for Vert. Axial Fans are inconsistent when compared to the documentation	Rework Reject	7-11-80	R. MacGlashan
1119	12-19-77	M-106AC. CS lugs for hanger 10"-IHBC-110-H4 have a heat number that is not traceable to the MTRs.	NA Reject	2-27-78	D. Duff
1120	12-19-77 P/M	M-55. Gouges in Heat Exchanger nozzels, 0E-76A&D	Std. Repair	7-1-80	C. Fugate
1121	12-19-77	C-231. Concrete surface has too thick Grout cover. A(608)	Use as is	2-2-78	S. Kirker
1122	12-19-77	M-305. Socket weld raised face flanges do not meet complete marking requirements per ASME Sect. III	Reject	6-2-78	T. Christofferson
1123	12-19-77	M-305. Designation of Service Rating is not stamped on Socket Weld Pipe Plugs.	Reject	2-3-78	R. Montreuil



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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1637	11-10-78	M-150. Fill Hopper Assemblies, the Stainless Steel Covers of the fill hoppers were delivered in various %'s of Rust.	Rework	4-14-80	F. Mahala
1638	11-10-78	F-29257. Clevises w/pin and cotter(10 pcs.) were not listed on the shipping list and hence are not certified.	Reject	4-12-79	R. Valentine
1639	11-10-78	F-27952. Nuclear Instruments Fitting. 129 type 6- $\frac{1}{2}$ -AW2 adapters were received at jobsite, which exceed allowable	Reject dimensions	12-1-78	J. Slifer
1640	11-10-78	J-202. Local Control Panel. pages of Documentation are illegible	Doc. Rework	11-15-78	J. Slifer
1641	11-10-78	E-20. Elec. Penetration Ass'y 1z-123, 2Z-144, not hooked up to purge header because of leaking modules.	Repair	7-2-80	J. W. Miller
1642	11-10-78	M-106. 1 $\frac{1}{2}$ " Fig. 299 Clevis (100 Pcs.). pin & cotters not traceable to Certificate of Compliance	Doc. Rework	11-30-78	R. Yonekawa
1643	11-10-78	F-30341. Structural Tube-200', 6x6x $\frac{1}{2}$ shipped without required documentation.	Doc. Rework	3-2-79	R. Montreuil
1644	11-10-78	F-27660. Reactor Building Exhaust Stack Supports, supports struts are rotated on axis not allowing fitup	Reject	12-20-78	J. L. Gray
1645	11-13-78	M-117 AC. Motor Operated Valves, manufactured with Schedule 80 on only one side(end) and Sch. 40 on other side.	Reject #2 repair #1	11-30-79	M. Moore
1646	11-14-78	C-208. Concrete Test Specimen. curing tank #20 had a temp of 69 degrees exceeding requirement by 1 degree.	Use As Is	1-11-79	T. Leib
1647	11-14-78	C-231. Cut Rebar. a #11 vert. bar was cut on the south face of G line wall.	Use As Is	2-1-79	J. Moyers
1648	11-14-78	C-111-181. Flued Head found with a void after stress relieving	Repair	12-21-78	J. Savoia
1649	11-14-78	M-64 Safety related chill water exp. internal surface of tanks have heavy rust.	1&2N/A Rework	12-15-78	M. Guliano
1650	11-15-78	Dwg. C-401. Backing bars used on pipe restraint FPGW's but not indicated on drawing.	N/A	11-21-78	B. Daly
1651	11-15-78	Dwg. M-616 Sh. 10. Wall thickness of spool is .099" less than required.	Std Repair	4-10-80	F. Mahala
1652	11-15-78	M-204, FW 16 of M-603 sh. 16 was welded with no QCIR (Inspection Record)	Use As Is	2-11-80	J. Cabral
1653	11-16-78	M-104. 2HBC-14-S613-6-1 spool piece has wall thickness of .128 minimum wall thickness is .1295	Use As Is	3-9-79	J. Huron
1654	11-17-78	M-129. Nuclear Service Valves. Received without G-321-D.	Reject Doc. Rework	1-9-80	M. Moore
1655	11-17-78	M-104 Pipe hanger Assemblies no dwgs received with spools.	Doc. Rework	4-3-79	R. Montreuil



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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	6 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1750	1-9-79	E-11-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-11	Use As Is	8-27-79	R. Moray
1751	1-9-79	E-13-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-13	Use As Is	1-23-80	C. Spinks
1752	1-9-79	E-19-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-19	Use As Is	8-14-79	R. A. Moray
1753	1-9-79	E-21-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-21	Use as is	2-23-79	R. Moray
1754	1-9-79	E-22-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-22	Use As Is	8-3-79	R. Moray
1755	1-9-79	E-26-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-26	Use as is	2-23-79	R. Moray
1756	1-9-79	E-45-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-45	Use As Is	8-30-79	R. Moray
1757	1-9-79	E-49-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-49			
1758	1-9-79	E-205-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec E-205	Use As Is	7-25-79	R. A. Moray
1759	1-9-79	J-201-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-201	Use As Is	7-17-80	R. Moray
1760	1-9-79	J-202-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-202	Use As Is	7-17-80	R. Moray
1761	1-9-79	J-204-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-204			
1762	1-9-79	J-207-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-207	Use as is	5-18-79	R. A. Moray
1763	1-9-79	J-255-A. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-255			
1764	1-9-79	J-256-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-603	Use As Is	11-16-79	R. A. Moray
1765	1-9-79	J-258-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-605	Use as is	5-14-79	R. A. Moray
1766	1-9-79	J-275-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec J-275			
1767	1-9-79	M-14-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-14			



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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1786	1-9-79	M-127-A. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-127	Use As Is	9-12-79	R. Moray
1787	1-9-79	M-127-B. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-127	Use As Is	11-9-79	R. Moray
1788	1-9-79	M-127-CC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-127	Use As Is	11-9-79	R. Moray
1789	1-9-79	M-132-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-228			
1790	1-9-79	M-134-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-134			
1791	1-9-79	M-146-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-146	Use As Is	11-9-79	R. Moray
1792	1-9-79	M-149-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-149			
1793	1-9-79	M-150-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts. per spec M-150			
1794	1-9-79	M-163-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-163	Use As Is	11-9-79	R. Moray
1795	1-9-79	M-168-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-168			
1796	1-9-79	M-169-AC. Q-mat'l indeterminate in regards to satisfactory completion of qualification test req'mts per spec M-169	Use As Is	7-15-80	R. Moray
1797	1-9-79	M-61. 3/4" diameter mounting holes have been elongated approx. 3/8", and equipment moved to install piping	Rework	1-19-79	M. Gulaino
1798	1-9-79	J-258-AC. Gages, output sensing line and pneumatic supply tubing damaged on control valve 1TV-1621B	Rework	7-7-79	E. Urbanbanawiz
1799	1-10-79	F-31737. 975-5/8"x6" Kwik Bolt Stud Anchors were not stamped with manuf. length ID mark.	Reject	1-24-79	T. Estes
1800	1-10-79	M-204. Incorrect welding Proc. listed on WR-5; welding of CS pipe to SS pipe.	Rework	7-24-80	C. Fugate
1801	1-10-79	C-231. Pour #A(704.54)f had low curing temps. for approx. 21 hours.	Use As Is	3-27-79	J. Moyers
1802	1-10-79	M-204. Check Valve 2 1/2"-CCB-CK-L (403-2-79) missing one hinge pin cover; integrity indeterminate.	Rework		
1803	1-10-79	M-204. Spool IHBC-147-S-616-9-1 has an arc strike on the west lower 90° elbow.	Rework	11-9-79 6-2-80	F. Mahala F. Mahala

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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1823	1-18-79	M-106 ITT Grinnell Pipe Hangers, no Quality Verification Documentation was received with shop order (EMD-263)	Doc. Rework	12-11-79	R. Montrueil
1824	1-18-79	M-106 ITT Grinnell no Quality Verification Documentation was received with shipment, also material location is unknown.	Doc. Rework	3-16-79	R. Montrueil
1825	1-18-79	C-305 Seismic Conduit & Box Supports, these items have supports attached to block wall which is not in accordance with J-253 Atmospheric Steam Pump Valves, tags for valves contain the wrong item number and valve I.D. number.	Doc. Rework	7-9-80	R. MacGlashan
1827	1-20-79	M-106 Bolts, no quality verification documentation was received for ITT Grinnell shop order EMD-149-01.	Doc. Rework	5-8-79	R. Montrueil
1828	1-20-79	C-304 Sleeve MFA 2A&2B, was done without an open Inspection Record.	Use AS Is		
1829	1-22-79	C-304 Fab. of angle frames, was accomplished without an open, inspection record.	Use As Is	2-15-79	J.C. Huron
1830	1-19-79	C-231 Concrete Curing, temperature were to low for to long of time.	Use As Is	8-7-79	C. Pavledes
1831	1-22-79	F-32624 Smis Butt Weld Elbows, G-321-D received wrong purchase spec.	Rework Doc. Repair	1-27-79	B. Mac Glasha
1832	1-22-79	G-24 Misc. Metals, inryco has hever submitted sample panels for approval.	Use As Is		
1833	1-23-79	M-204 Voltage Measurements indicated that 3 were welded to less volts.	Use As Is	3-23-79	J. Huron
1834	1-23-79	F-10-205 Station Batteries, Maintainance Deficiency.	Rework	3-22-79	M. Donovan
1835	1-25-79	C-50B-AC Emergency Airlock, Discrepancies for gaulity Verification documentation was found.	Use As Is	3-19-79	B. Mc Glashan
1836	1-25-79	F10-145 Service Water Pump Moters, power supply to motor space heaters has been disconnected since 1/12/79.	Use As Is	3-14-79	C. Fugate
1837	1-25-79	C-304 Installation of Cable Tray Supports, voltage measure was outside the WPS specified value.	Use As Is	6-12-79	D. Squires
1838	1-26-79	M-118 Main Steam Isolation Valve, Wrong Rev. on G321-D was in QVD pkg., valve reducers have wrong heat no. doc. don't corr. with Q.V.D. pkg.	Doc. Rework	5-30-79	D. A. Delaney
1839	1-26-79	C-208 Embed Channel, was cut out.	Uae As Is	3-6-79	/ J. Moyers
1840	1-29-79	M-134. Page 3 of 3 for Code Data Reports on G-321-D not received with valve shipment.	Doc. Rework	1-30-79	R. Valentine
1841	1-29-79	C-439 Pump return line restraint 1 embed, were installed	Rework Use As Is	12-20-77 5-18-79	P Vanderveer S. Kirker



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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
1917	2-28-79	E-26 600 volt control cable no G-321-D was received with documentation. Reel was sent to site by error.	Doc Rework Reject	1-14-80	R. Montreuil
1918	2-28-79	J-253 Atmospheric Steam Dump Valves, tags for valves contain wrong item & valve I. D. Number.	Doc. Rework	7-9-80	R. MacGlashan
1919	2-28-79	M-204 Pipe Spools, has a large arc burn Approx 8" long & 1/2" wide.	Rework	3-14-79	F. Mahala
1920	2-28-79	M-214 Yard piping lines cannot be established therefore are indeterminate.			
1921	3-1-79	E-632 Horizontal and vertical components of tray 1AJR06 welded to "C" section brackets contrary to dwg. detail.	Use As Is	3-28-79	C. Cameron
1922	3-1-79	C-304 Q-listed embed has gouges in excess of 1/32" to 1/8" at el. 634' SW corner Cont. #1 secondary shield wall	Rework	12-20-79	E. Dutton
1923	3-1-79	C-304 Three type 1 1/4 conduit supports were not welded per detail 59, case 6 on dwg. E-42.	Use As Is	3-29-79	D.C. Squires
1924	3-1-79	E-621 Cable tray section 2AKA09 has one rung which is not fully secured to the tray.	Rework	10-1-79	D. C. Squires
1925	3-1-79	E-36 Conduits 1AJJ003 & 1AJJ012 are not installed per the layout Dwg. E-632, Rev. 5.	Rework	2-7-80	S. Marietti
1926	3-2-79	M-53 Five pumps received with incorrect G-321-D forms	Doc. Rework	5-16-79	R. Valentine
1927	3-2-79	F-32461 purchase order received with no documentation.	Doc. Rework	3-23-79	T. Estes
1928	3-2-79	M-204 Two 3/4" seal weld plugs installed without heat numbers or heat code on line 2HBC-207	N/A	3-13-79	L. Brown
1929	3-5-79	E-616 Trays, have been installed with only one weld per rail.	Rework	7-3-79	C. A. Cameron
1930	3-5-79	E-26 2Conductor #14 Cable, doesn't have the asbestos/poly-ester binder tape between outer jacket & individual cond. insulation	Use As Is	6-20-79	K. Nutaitis
1931	3-6-79	C-230 Concrete, was placed into forms with slumps of 6 1/4" & 6" respectively when measured at point of placement.	Use As Is	5-17-79	P. Vanderveer
1932	3-6-79	C-304 Miscellaneous Steel welds are in violation of C-304 & the close proximity makes welds inaccessible for repair.	Use As Is	4-11-79	D. C. Squires
1933	3-6-79	M-134 Valves, Instructions for installing valves were not followed, leaving integrity of internals of valves indeter- ^{minant}	Use As Is	11-8-79	L. Brown
1934	3-7-79	C-304 QListed C/S Embeds, three gouges have been found on Q-Listed Embeds.	Rework	11-13-79	S. Gelnett

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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
2008	3-29-79	M-215 ASME SA-106, Grade B Pipe, was delivered without G-321-D. Material purchased on P.O. F-32945 Q, AEO-8341.	Doc. Rework	5-1-79	R. Valentine
2009	3-29-79	M-305 ASME SA-105 Heat code # 778 Insert, inserts received on freight bill #CB227916 has no marking on it.	Reject	5-21-79	M. Moore
2010	3-29-79	M-204 Pipe Spool 1HBC-109-S619-14-2, has an ARC strike approx 13" from 45° ELL.	Std. Repair	8-9-79	W. Smith
2011	3-29-79	M-204 Spool 1-HBC-123-S616-8-3, is heavily pitted on the gasket sealing surface.	Rework	7-5-	D. Kimbro
2012	3-29-79	P-2.10-619-9-1 Pipe Hanger 8"-OHBC-21-H4, item #1-4" M-beam was used instead of 3" B-Beam, & hanger is resting against pipe spool.	Rework	4-14-80	R. Urbanawiz
2013	3-29-79	M-326 Large bore pipe hanger, item 5 welded to decking support angles, item 2 has damage to lower flanges adjacent clevis.	Rework	8-2-79	C. Fugate
2014	3-29-79	C-10177C-1018 Missing Horizontal Curb Lowels, no horizontal dowels were installed, in north wall.	Rework	10-19-79	P. Haren
2015	3-30-79	E-22. Quality of cables is indeterminate due to the presence of water within the cables.	Doc. Rework Repair		
2016	3-30-79	FSK-H-2HBC-207-1. Welding and fabrication accomplished w/o QC welding or piping doc, verification or acceptance.	Reject	7-9-79 9-10-79	E. Urbanawiz
2017	3-30-79	M-214 Borated water storage tank T-60, line 2HCB-1, Pen. No. 2 (18"SS) is out of location.	Use As Is	5-8-79	T. Aritola
2018	3-30-79	C-233 Misc. Fabricated Steel with nuts, Bolts & washers packages received on invoice #002065 are illegible & signatures cut off.	Doc. Rework	3-18-79	M. Moore
2019	3-30-79	M-1.35 1 Differential Pressure Transmitter, was moved without either required documentation or quality control release.	Doc. Rework	7-17-80	D. Delaney
2020	3-30-79	M-201 4EA. 3" Sch 40 x 2" Sch 80 Smls Conc. Reducers. No G-321-D form or documentation was received.	Doc. Rework	6-22-79	M. Moore
2021	3-30-79	M-201 Pipe received on Grinnell order #KER 10732-P, G-321-D was not signed by supplier or shop inspector.	Doc. Rework	5-7-79	M. Moore
2022	4-2-79	F-29256 Spring Hanger was received without the certificate of conformance.	Doc. Rework	5-1-79	R. Valentine
2023	4-2-79	M-204 Spool #2HCB-322-S634-2-7, wrong size elbows was installed in spool without proper engineering approval.	Non- Nonconformance	5-9-79	L. Brown
2024	4-2-79	M-657 Spool 2HBC-217-657-4-6 a 3" pup pc. Ht. #2495 was incorporated into this spool without proper engineering approval.	N/A	5-9-79	T. Aritola
2025	4-3-79	C-208 Embecco Masterflow 713 Nonshrink Grout, no final results of shrinkage tests have been received.	Doc. Rework	1-15-80	R. MacGlashan

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W-20 4-2-80
7-7-80



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2 NCR NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
2186	5-14-79	J-255B. Nuclear Service Control Valves, 2HV-0407 & 2LV-0444, incomplete quality verification documentation.	Doc. Rework	5-30-79	B. MacGlashan
2187	5-15-79	M-631 Sh. 1. Flued head, 1Z-39, has a large arc burn on inside near FW 1.	Std. Repair	6-4-79	K. Roberge
2188	5-15-79	F-27952. Documentation is not traceable to material, G-321D is incomplete and incorrect in some entries.	Doc. Rework	7-6-79	R. A. Montreuil
2189	5-16-79	F-35238. Hex head bolts, washers and nuts, certificate of compliance states conformance to different grade than in P.O.	Use As Is	6-18-79	T. Estes
2190	5-16-79	F-34998. Washers and caps screws received with no statement of conformance or certificate of compliance.	Doc. Rework	6-1-79	R. Montreuil
2191	5-16-79	F-10-204. Safety Related Equipment Rooms, equipment left uncovered during construction work; dirt & dust in panels.	Rework	11-26-79	L. Brown
2192	5-16-79	M-610 Sh. 6. Hairline crack in ss socket for instrument ITE-1029B on pipespool 1FCB-22-S610-6-2.	Rework	4-2-80	F. Mahala
2193	5-18-79	E-632. Conduit support installed, specified across-the-flange weld altered by field without project eng. approval.	Use As Is	6-25-79	S. Marietti
2194	5-18-79	E-629. Box support installed without prior project approved drawing.	Use As Is	7-3-79	C. Cameron
2195	5-18-79	E-624. Sh. 2. Box support installed without approved drawing or specification.	Use As Is	9-13-79	C. Cameron
2196	5-18-79	M-129BC. Valve, 1/2" ECB-GP-DV has fillet weld which is not within drawing specification.	Reject Rework	3-7-80	F. Mahala
2197	5-18-79	Hanger Sketch expansion anchors installed with no visually inspection for correctness.	Rework	3-24-80	F. Mahala
2198	5-18-79	M-657 Sh. 38. Pipe Spool 0HBC-78-S657-38-1 has a minimum wall thickness violation.	Repair	7-7-80 2-15-80	C. Fugate F. Maffra
2199	5-21-79	E-22. Three conductor 350 MCM Cable, vendor manufacturing flaw in the outer firewall III Jacket.	Rework Repair	1-23-80	C. Spinks
2200	5-21-79	E-650 Sh. 1. Two anchor bolts installed with no marking or coding.	Use As Is	12-6-79	R. Amos
2201	5-21-79	M-125C. Nuclear Service Valves, documentation discrepancies involving pages numbered and supplied.	Doc. Rework	6-19-79	B. MacGlashan
2202	5-21-79	E-60. Instrument and special purpose cable was received with no quality verification documentation. (Cable I-18)	Doc. Rework	8-17-79	T. Estes

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2366	7-21-79	E-22. 3/C #350 MCM Cable, Reel indeterminate due to flaws in cable scheme IAB1702 B & 2BB1805 B.	Reject Rework	6-11-80	C. Urbany
2367	7-19-79	F-3150. Socket weld reducing inserts; no G-321-D received with quality verification documentation.	Doc. Rework	9-5-79	R. Montreuil
2368	7-19-79	F-35159. Hilti Kwik Bolts, received on AEO-9949 without documentation.	Doc. Rework	7-23-79	M. Moore
2369	7-19-79	F-34876. Studs and nuts received on AEO-9981 has no G-321-D.	Doc. Rework	10-16-79	M. Moore
2370	7-19-79	F-35266. Studs received on AEO-9909 has no G-321-D.	Doc. Rework	8-15-79	M. J. Moore
2371	7-19-79	E-757. Bracing; 2 areas of excessive grinding that required major repair were repaired without project engineering approval.	Use As Is	11-1-79	J. W. Miller
2372	7-23-79	E-650 Sh. 1. A 3/8" stud anchor installed 1 1/2" from abandoned hole & hole was not repaired prior to loading the anchor	Rework	3-27-80	J. W. Miller
2373	7-24-79	C-1AC. Post-tension tendons have wire lengths indeterminate because of a malfunction of the automatic cut-off shears.	Reject	10-4-79	S. Gelnett
2374	7-24-79	M-619 Sh. 17. Field welds 10, 11, 12, 13, 15 were made by welder P-742 who was not qualified in the weld procedure used.	Rework	7-22-80	Lee Harrison
2375	7-24-79	FSK-M-2CCB-33-3. Socket weld 12 has no fit-up scribe marks leaving fit-up of socket weld indeterminate.	Rework		
2376	7-24-79	M-614 Sh. 11. Pipe spools 2HCD-151-S-614-11-2,3; installed in contact with four "Q" listed conduits & an unscheduled pullbox.	Rework	6-16-80	D. Squires
2377	7-24-79	C-304. Across the flange welding performed without prior approval of project engineering.	Use As Is	10-29-79	G. Cheves
2378	7-24-79	F-3107. Welding performed on misc. fabricated metals with weld procedures that were not prequalified to Bechtel dwgs. & specs.	Use As Is	10-30-79	R. Montreuil
2379	7-25-79	E-650 Sh. 1. A type 14 conduit support for 2AG083 is welded continuously across the bottom flange of the beam.	Repair	6-24-80	E. Dutton
2380	7-25-79	Service Water Strainer, OF-75C, mounting holes are not spaced as called for on dwg. M-180-2-5.	Repair #2 Use As Is #1	12-5-79	C. Fugate
2381	7-25-79	Make-up pump, 2P-58B, during maintenance inspection, metal rubbing sound originating from within the pump casing area.	N/A	6-3-80	S. Schumitch
2382	7-25-79	C-2. Installed post tensioning tendons, one wire in tendon V-77-2 does not have a buttonhead on shop end of tendon.	Rework	11-8-79	P. VanderVeer
2383	7-25-79	C-2. Installed post tensioning tendons, horizontal H21-234 & H21-236 have tendon wires with a Level E rating due to rusting & pits.	Use As Is Reject	3-18-80	P. Vanderveer
2384	7-26-79	C-485. Bolts installed in pipe restraints 611-1-6A & B w/o a hardened washer under the bolt head.	Use As Is	5-8-80	E. Dutton

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2423	8-9-79	C-50. Several 1/8" and deeper undercuts exist on leakchase on the Personnel Lock.	Rework	12-6-79	A. Lamach
2424	8-9-79	F-36237. Round rod received on AEO-10026 has no documentation; rod not located for visual inspection.	N/A	10-18-79	M. J. Moore
2425	8-10-79	Relatively humidity exceeded 50% in 'class 'A' Warehouse violating requirement of F-1-268.	Use As Is	10-3-79	F. Mahala
2426	8-10-79	Dwg. E-658. FCN-E-848 written and approved to allow over a 10' length of 2" conduit supports.	Use As Is	10-1-79	J. W. Miller
2427	8-10-79	Dwg. E-655. Spec. C-305. 3/2" anchors have embedment length greater than 2 1/2". Support spacing between anchors greater than 7'6"	Rework Use As Is	11-23-79	J. Miller
2428	8-10-79	FSK-DVI-M-617-6-11, SW 2-3-4-5 on Conn #11 was welded completely prior to attachment of copy #4 of the QCIR W-1.00 or Fit-up acceptance	Rework	3-12-80	F. Mahala
2429	8-10-79	FSK-DVI-M-604-5, SW #47-49-50 was completely welded, prior to attachment of copy #4 of QCIR W-1.00B or fit-up acceptance by the FWE	Rework	5-7-80	C. Fugate
2430	8-10-79	E-42. Three supports welded to a P3300 with a continuous "flair V" weld(both sides) along its length.	N/A	1-31-80	D. Squires
2431	8-10-79	Dwg. C-277. One #8 horizontal splice & one vertical #8 were cut out of the pent. on each face.	Use As Is	2-14-80	S. Gelnett
2432	8-10-79	J-201. Cable entering panel 2C11 is not meeting separation requirements. Cable is within 6" of internal red channel wires.	Rework	7-2-80	C. Stevens
2433	8-11-79	C-305. Dwg. E-650 sh. 1. Stud anchors broken off slightly violating SCN 9005.	Rework	1-9-80	R. Amos
2434	8-11-79	Dwg. E-755 sh. 1. Embedment length of stud anchors violates requirements of SCN C-305-9002.	Use As Is	2-29-80	J. W. Miller
2435	8-11-79	Dwgs. E-750 sh 18 & 29. E-750 sh3. Conflicting requirements for anchor embedment, drawings vs. Spec. C-305.	Use as is	9-25-79	R. Amos
2436	8-10-79	E-42. Wrong support has been installed for pull bcs 4DJ442.	Rework	1-14-80	H. Tuttle
2437	8-13-79	Relative humidity exceeded 50% in Class "A" warehouse violating requirements of F-1-268.	Use As Is	10-4-79	F. Mahala
2438	8-13-79	Dwg. E-642 sh 2 & E-643 sh 2. Pull boxes installed using anchors and bolts that do not have ASTM code on the head. Spec. C-305 reqmnt.	Rework	12-14-79	J. Miller
2439	8-13-79	FPM-2.000. Aux. Bldg. Strain on nozzle weld indeterminate due to no monitoring of pump alignment.	N/A	8-15-79	M. Guliano
2440	8-14-79	C-305 HDI Anchors, embedment of anchors should be 1 5/8", actual embedment of these anchors are 1 3/8" only.	Rework	12-14-79	J. Miller
2441	8-15-79	F-3107. Welding performed on misc. fabricated metal w/ weld procedures that were not prequalified to req'mts of dwgs. and specs	Use As Is	10-30-79	R. Montreuil

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2651	10-24-79	Discrepancy between Field Installation Manual C-2-146 Rev. 10 & Field Eng. Procedure FPC-4.000 over stressed tendons & gauge pressure.	Use As Is	11-5-79	P. VanderVeer
2652	10-24-79	During rework of wireway #2AWW016, cable pulled out for scheme 2AA0512X was found to have insulation damage.	Repair	12-13-79	K. Drew
2653	10-24-79	During rework of wireway 2AWW019, cable pulled out for scheme 2AW006A was found to have insulation damage.	Std Repair	12-13-79	K. Drew
2654	10-24-79	C-1011. Equipment bolts damaged. To avoid warranty problems, supplier must concur with repair or modification of bolts.	Repair	6-20-80	C. Pavaledes
2655	10-23-79	Post Tension, two failing buttonheads not repaired to rebuttonheading procedures as required in C2-146 Rev. 10.	Use As Is	11-12-79	P. VanderVeer
2656	10-25-79	M-531-3. Improper material used for welding brackets to flued head 2Z-80, 2Z-81, contrary to Spec. M-204. Arc strikes on flued head.	Std. Repair	3-3-80	E. Urbanawiz
2657	10-25-79	F-38960 Sixty-five hex head bolts received have a thread area 1 3/16" long 2 1/2" thread required	Reject	11-7-79	R. Mac Glashan
2658	10-26-79	M-151-A. Q-material indeterminate regarding satisfactory completion of the qualification test report.			
2659	10-26-79	M-140-A. Q-material indeterminate regarding satisfactory completion of the qualification test report.	Use As Is	7-21-80	D. Delaney
2660	10-26-79	M-129BC. Q-material indeterminate regarding satisfactory completion of the qualification test report.	Use As Is	4-4-80	R. MacGlashan
2661	10-26-79	M-90. Q-material indeterminate regarding satisfactory completion of the qualification test report.	Use As Is	2-25-80	F. Mahala
2662	10-26-79	M-55AC. Q-material indeterminate regarding satisfactory completion of the qualification test report.	Use As Is	2-25-80	F. Mahala
2663	10-26-79	M-18AC. Q-material indeterminate regarding satisfactory completion of the qualification test report.			
2664	10-26-79	J-255BC. Q-material indeterminate regarding satisfactory completion of the qualification test report.	Use As Is	7-21-80	D. Delaney
2665	10-26-79	J-245AC. Q-material indeterminate regarding satisfactory completion of the qualification test report.			
2666	10-26-79	C-46AC. Q-material indeterminate regarding satisfactory completion of the qualification test report.			
2667	10-26-79	C-44AC. Q-material indeterminate regarding satisfactory completion of the qualification test report.			
2668	10-26-79	C-24AC. Q-material indeterminate regarding satisfactory completion of the qualification test report.			
2669	10-26-79	C-18. Q-material indeterminate regarding satisfactory completion of the qualification test report.			

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2784	12-7-79	E-608, E-614. Motor operated valves have oil on vendor installed limit switch wiring insulation contrary to spec. J-218.	N/A	3-11-80	R. Narcavage
2785	12-7-79	E-532. 3 out of 4 expansion anchors used to install fusible switch 2D13 failed to meet minimum embedment length per Spec. C-305.	Rework	7-9-80	C. Stevens
2786	12-7-79	E-608, E-611. Motor operated valve IMO-1907 has crack in motor housing; IMO-1020B, several motor cooling fins broken off.	Rework Use As Is	5-7-80	R. Narcavage
2787	12-7-79	E-611, motor operated valve, IMO-1010, motor housing has a crack exposing the motor windings, motor housing has arc strike	Rework	5-20-80	H. Stevens
2788	12-7-79	E-22AC. Documentation and G-321-D received refers to Rev. 4 of spec.; the P.O. requires rev. 5.	Use As Is	2-13-80	J. Kramer
2789	12-7-79	E-22AC. Documentation and G-321-D received refers to Rev. 4 of spec.; the P.O. requires rev. 5.	Use As Is	2-13-80	J. Kramer
2790	12-10-79	ESK-M-2HBC-497-2. Socket weld #7 has undersized weld.	Rework	12-12-79	N. Hollenbeck
2791	12-11-79	ESK-M-1HBC-498-6. Socket welds are undersized per Spec. G-27.	Rework	12-14-79	G. Earp
2792	12-11-79	ESK-M-1HBC-4-8. Socket welds are undersized per Spec. G-27.	Rework	12-14-79	G. Earp
2793	12-11-79	ESK-1HBC-498-6. Socket welds are undersized per Spec. G-27.	Std. Repair	12-14-79	G. Earp
2794	12-11-79	ESK-M-1HBC-498-3. Socket welds are undersized per Spec. G-27.	Rework	12-14-79	G. Earp
2795	12-10-79	F-39770. Hilti Kwik Bolts, no quality verification documentation received.	Doc. Rework	12-28-79	J. Kramer
2796	12-11-79	F-37893. Hilti Kwik Bolts, no quality verification documentation received.	Doc. Rework	12-28-79	J. Kramer
2797	12-11-79	J-233AC. Socket weld Thermowells, G-321-D and Certificate of Compliance received refers to wrong revision to Spec. J-563.	Doc. Rework	2-22-80	J. Kramer
2798	12-12-79	M-204. Welds on four drawings (see NCR) have scribe lines.	Std. Repair	12-14-79	N. Hallenbeck
2799	12-12-79	ESK-2HBC-498-2 & ESK-M-2HBC-4-3 have undersized welds.	Rework.	12-14-79	G. Earp
2800	12-12-79	Restressed tendons H32-210 & H21-210 were not adjusted to reflect indeterminate state of previously protruding wires.	N/A	1-5-80	P. Vanderveer
2801	12-12-79	F-37646. No statement of conformance submitted by the vendor for item #6.	Doc. Rework	1-15-80	F. Kanchwala
2802	12-12-79	F-37893. No quality verification documentation received for item #1.	Doc. Rework	1-3-80	F. Kanchwala

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2860	1-18-80	E-599-1. Conduit 1A018 is misaligned causing cable 1AB5531A bend radius to be below required minimum. Spec. E-42 & FPE 4.0000.	Rework	6-20-80	C. Urbany
2861	1-21-80	Two wires of tendon H32-221 were found with gouges approximately 2" to 4", contrary to C2-146.	Use As Is	2-21-80	P. Vanderveer
2862	1-22-80	C2-146. Post-tensioning; while buttonheading 1 wire found with gouges on the field end of the tendon.	Reject	1-29-80	P. Vanderveer
2863	1-23-80	Twelve wires on tendon H32-231 found with gouges contrary to C2-146.	Reject	2-22-80	S. Kirker
2864	1-23-80	E-644 Sh 1. Installation of cable trays are violating DCN #15 and FCR-E-1514.	Rework Repair	Use As Is 7-14-80	J. Petrosino
2865	1-24-80	E-22. Cable sealing cap for reel no. 4674 was damaged exposing cable end.	Use As Is	3-31-80	C. Urbany
2866	1-24-80	M-247. Milliampere Hydramotor actuators manufactured from an incorrect materail.			
2867	1-25-80	M-18. Bolts supplied by vendor "wobble" in thread holes on sole plate.	Reject	2-18-80	D. Delaney
2868	1-24-80	F-39253. 27 pieces of carbon steel pipe received after cleaning on AEO-11419 do not have heat number traceability.	Reject	2-12-80	R. MacGlashan
2869	1-25-80	Spool 1HBC-304-619-8-1 has been gouged near a base metal repair.	Std. Repair	3-4-80	E. Urbanawiz
2870	1-25-80	E-629, box support has 6 attachment bolts not conforming to max. 3" spacing; incorrect fillet welds on unistrut mounted across flange, per E-42.	Use As Is	5-15-80	J. Petrosino
2871	1-28-80	F-3154. plates & angle fittings, certificate of compliance does not reference required compliance to ASTM A570 galvanized coating.	Doc. Rework	2-13-80	F. Kanchwala
2872	1-28-80	Dwg. A-52 Sh 1. Rebar in masonry wall; vertical rebar has been spliced contrary to drawing detail #8.	N/A	2-12-80	S. Kirker
2873	1-31-80	E-623. Field winding leads of safeguard chilled water pump. 1VP-02B, cut too close to motor winding for termination.	Reject	3-21-80	E. Badmagharian
2874	1-31-80	E-42. Conduit 2AE050 has conduit supports that have all of the unistrut lengths exceeding 1'0". Contrary to spec, maximum length.	Rework Inspect & Use As Is	4-1-80	J. Petrosino
2875	1-31-80	E-617 Sh 2. Box support 2BJ399; 2 anchors do not meet min. edge distance & have excessive thread lengths, Spec. C-305.	Rework	5-5-80	E. Mann
2876	1-31-80	C2-146. Horizontal tendons H13-245 & H21-245 greased while bulk tank temperature was 254°F, exceeding maximum temp. range.	Use As Is	3-13-80	S. Kirker
2877	1-31-80	E-626, 629. Type 30 supports installed on wide flange, approx. 26' in length on conduit 2BE039 exceeding max. length per E-42.	Not an NCR	2-25-80	J. Petrosino
2878	1-31-80	Welds made by P-635 on M-602-3, M-613-2, M-665-1; several different FW's, using a procedure which he was not qualified to perform.	Use As Is	4-17-80	D. B. Daly

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2898	2-13-80	Foundation bolt for neutral ground resistor sole plate was broken during installation of sole plate.	Rework Reject Repair	4-23-80	A. Lobrovich
2899	2-14-80	Failed to meet requirements of storage and maintenance on tendon H21-235 per P.O. C-2, Spec. C-87.	Use As Is	5-15-80	P. Vanderveer
2900	2-15-80	PFE 7.000. Cracked terminal strips; had crimps on vendor wires electrical penetration assemblies.	Rework	6-17-80	J. W. Miller
2901	2-15-80	F-45206. Stock Steel, angles, beams & plates have no size, Bechtel's P.O. number or heat number printed on material.	Doc Rework Reject	3-11-80	F. Kanchwala
2902	2-18-80	P.O. M-1.14. Seal return collar IE-59B does not have a nameplate attached.	Rework		
2903	2-19-80	Spec. M-204. Pipe damaged by backhoe; coating damaged, piping gouged. FSK-M-1HBC-4-2 has been bent between FW 3 and FW2.	Rework	5-1-80 5-15-80	C. Fugate H. Gabbitose
2904	2-19-80	C2-146. Prior to greasing, drain on tendon H32-237 was not closed.			
2905	2-19-80	F-45097. Steel strips, material was removed from combo shop to paint shop; all items are not now available for inspection.	Reject	5-5-80	F. Kanchwala
2906	2-19-80	E-12. Station batteries, status of Q material is indeterminate in regard to satisfactory completion of qualification test report.	Reject		
2907	2-20-80	J-233AC. 10 thermowelds on AEO-11653 were released to field prior to final signoff and released by QC receiving.	Doc Rework	3-7-80	R. MacGlash.
2908	2-21-80	E-609. Several motor operated valves; internal limit switch leaking oil, damaged torque switch shunt contacts, vendor wiring insulation damaged.	3. N/A Rework damaged	6-6-80	S. Schumitch
2909	2-21-80	E-654. Hydrogen recombiner, 2VE-54B, has a bent louver on the top section from the surrounding construction activities.	Rework		
2910	2-22-80	Cable insulation damage due to anchor bolt penetrating cable for scheme 1AB2312A.	Use As Is	3-10-80	H. Waatti
2911	2-25-80	Dwg. C-128. Storage tanks 1&2T60. Asphalt impregnated board covered with asbestos paper to be placed between tanks bottom. Paper covers entire tank floor.	Use As Is	4-3-80	R. Bennett
2912	2-26-80	E-205-363-3. Harness of wires installed between the push rod lever mechanism & right side wall of 2A05 compartment 508 is too large.	Rework	3-11-80	C. Stevens
2913	2-26-80	Items listed on NCR block 16 are non-conforming per PSP G-4.1 based on the calibration of torque wrench BFC C2066 being out of tolerance.	Rework, Reject, Use As Is, Repair	7-28-80	Neil Plante
2914	2-26-80	F-30042. Vendor SDDR's #5-79, 6-79, 8-79, submitted with documentation on AEO-11521; not reviewed & approved by proj. eng. & rejected.	1a N/A 1b Reject	6-5-80 2a Use As Is	F. Kanchwala
2915	2-26-80	C-618. Attachments to containment liner plates are to line up with the embedded vertical stiffener angles; within given tolerances.	Repair		
2916	2-27-80	SE/PSP G-3.2. Repair work was performed without prior proj. eng. disposition & subsequent PFE & PFOCE concurrence on NCR-2763 & 2774.	Doc Rework	3-11-80	G. Hoffman

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2955	4-1-80	M-610 sheet 6. Fw's 77, 78, 79, 80. Attachment welds welded to incorrect procedure.	Use As Is	6-23-80	C. Griffis
2956	4-2-80	Area adjacent to FW-49 on dwg. M-6 1-1 has been ground below minimum wall thickness, per Spec. M-204.	Std. Repair		
2957	4-2-80	E-532, Spec. E-6. Load Centers 1&2B17, 1&2B18 have terminal blocks with marker tags that are not engraved per Dwg. E-50.	Use As Is	6-23-80	C. Stevens
2958	4-4-80	E-11, replacement transformer T1273 for battery charger 1D27, documentation requirements are indeterminate.			
2959	4-4-80	C-439, C-477 embedded bolts for pump return line restraints; drawing change requires bolts be Charpy tested.	Use As Is	7-3-80	S. Kirker
2960	4-4-80	Spec. C-2. post-tensioning V-65-1, during buttonheading process, one wire was gouged.	Reject Use As Is	4-25-80	P. Vanderveer
2961	4-4-80	M-146-28-1. 1&2VP-59A&B, oil pump motors namplates have incorrect information, no marking for time rating, temperature & code letter.			
2962	4-4-80	Rodent damage in several locations on various cables in trench duct 1AX076.	Rework	5-1-80	C. Urbany
2963	4-7-80	C2-146. Several tendons, documented having the same anchor head heat no.s & group of tendons have identical bushing heat no.s			
2964	4-7-80	C2-146. Tendon H21-234 has 2 broken wires, 3 unseated buttonheads while completing stressing of reinspection of tendon.	Reject	4-15-80	K. Gunser
2965	4-7-80	F-1-402. Paint (Spec. A41); temperature exceeded acceptable requirements.	Use As Is	4-23-80	F. Mahala
2966	4-7-80	M-204. Pipe Spool 2HBC-109-S619-1-6, during repair of arc strike, violation of minimum wall thickness was found.	Use As Is	4-30-80	F. Mahala
2967	4-7-80	J-255A. Valves, OPV-6580A-1, A-2 & OPDV-657SA, numerous documentation problems; documentation indeterminate.			
2968	4-8-80	F-44645. Coupling nuts; per Spec. G-33 Charpy test report shows results do not meet 25 mils lateral expansion minimum requirement.	Reject	4-23-80	F. Kanchwala
2969	4-8-80	E-602-1. E-42. Field installed tray covers on cable trays 1AFL01 & 1AFL02, 1AQL01 & 1C3D02 using a stitch weld contrary to spec.	Use As Is	6-12-80	D. Squires
2970	4-9-80	C-305. 5/8" expansion anchors installed with less than minimum center to center spacing without prior project eng. approval.	Use As Is	5-20-80	S. Kirker
2971	4-9-80	C-50B. Replacement outer door seal, no shop inspection release or signature on G-321-D with documentation.	Use As Is		
2972	4-9-80	J-201. Control wires to various devices in control panels show inconsistency in wiring identification on all modification drawings.			
2973	4-10-80	F-45925. Paint received, upon inspection manufacturer's date on container & on certification exceeds 3 months old. Spec. A-41.	Use As Is	4-16-80	S. Kirker

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2 NRC NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
2993	5-2-80	FCR-C-2419 shows rebar to be cut while core drilling penetrations; penetration at El. 669'8" has 2 horizontal bars cut instead of one.	Use As Is	6-5-80	S. Gelnett
2994	5-2-80	G2-146 Post Tensioning, tendon V107 has three broken wires during stressing.	Use As Is	5-15-80	P. Vanderveer
2995	5-5-80	E-655 Sh 1. Two P1000 strut supports for 1CJ620 is welded with 3/16" continuous fillet welds, across flange contrary to E-42.	Use As Is	5-29-80	J. W. Miller
2996	5-8-80	C-305. A vertical bar was cut 8'4" away from two other cut vertical bars which is contrary to spec.	Use As Is	6-26-80	S. Kirker
2997	5-8-80	C-2AG. No documentation received for field bushings, nor MRR showing receipt of the bushings.	Doc. Rework	7-1-80	R. MacGlashan
2998	5-8-80	E-650 Sh. 1. 6" conduit 2BVA002 is less than 1" from a non-Q listed conduit which is contrary to spec. E-42.	Rework	7-3-80	J. W. Miller
2999	5-12-80	Spec. C-88. During a reading of the inline flowmeter, the meter was found not functioning properly.	Repair		
3000	5-15-80	Spec. C-304. Bolt holes burned on pipe restraints 611-1-24 & 611-1-29 to a diameter equal to or exceeding final diameter	Repair		
3001	5-15-80	Spec. G-27. Socket weld #3 on FSK-M-2CCC-15-2 has scribe lines.	Rework	6-10-80	F. Mahala
3002	5-20-80	Spec. C-306. 3 east-west bars cut while core drilling for grouted anchor bolts for pipe hanger 633-2-17, 1HBC-322-H8.			
3003	5-20-80	F-45770. High speed auxiliary relay, has no statement of conformance which is required by Spec. G-33.	Doc. Rework	6-6-80	J. Kramer
3004	5-22-80	Dwg. 533. Vendor termination OVM94A & OVM94B; conductors are nicked or cut.			
3005	5-23-80	F-46088. Master Builders 814 cable grout; no final results of the compressive strength or the shrinkage tests have been received.			
3006	5-27-80	F-44893. Hex head bolts; no charpy v-notched tests received for bolts, several pieces have injurious surface defects & thread damage.	Doc Rework Reject		
3007	5-27-80	F-45514 requires spare parts furnished per original Spec. M-123A & P.O.; this spec. leaves doc. for spare parts indeterminate.	Doc. Rework		
3008	5-27-80	F-45796 requires spare aprts furnished per original Spec. M-123B & P.O.; this spec. leaves doc. for spare parts indeterminate.	Doc. Rework		
3009	5-27-80	F-44060 requires spare parts furnished per original Spec. M-117 & P.O.; this spec. leaves doc. for spare parts indeterminate.			
3010	5-27-80	F-45567 requires spare parts furnished per original Spec. M-125B & P.O.; this spec. leaves doc. for spare parts indeterminate.	Doc. Rework		
3011	5-27-80	F-45566 requires spare parts furnished per original Spec. M-123B P.O.; this spec. leaves doc. for spare parts indeterminate.	Doc. Rework		

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PROJECT NAME ' Midland

JOB NO. ' 07220

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2 NRC NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
3012	5-28-80	E-599 Sh 1. Expansion anchors for conduit & box supports installed violating Spec. C-305 center to center, center to edge distance spacing.	Rework Repair	Use As Is	
3013	5-28-80	Motor controllers removed from motor control center, indicating lights and pushbuttons mounted on door contrary to Spec. E-7.	Reject		
3014	5-30-80	C-230. Pozzolanic Activity Index; fly-ash received on 5-30-80 at Allied concrete does not conform to ASTM C-618. Minimum not met.	Use As Is	7-7-80	S. Gelnett
3015	6-2-80	C-233. Dwg. C-370. Discrepancies noted in the radius and elevations of the support rings, will not permit the seal plate to fit properly.	N/A	6-19-80	S. Kirker
3016	6-3-80	C-208. ASTM-C-289-71. Chemical analysis of aggregate found to be non-conforming.			
3017	6-4-80	C-87. No monthly inspection was performed for the lot that consisted of the odd number vertical tendons (# V01-1 to V109-1, excluding V11-1, V101-1).	Use As Is	7-24-80	S. Gelnett
3018	6-4-80	C-2. Shop heads with heat codes #PW, Post tensioning system; heat treatment cert, of conformance has not been signed.	Doc Rework	7-1-80	D. Delaney
3019	6-4-80	F-45748, 45518 requires spare parts furnished per original Spec. M-123CC & P.O.; this spec. leaves doc. for spare parts indeterminate.			
3020	6-6-80	M-104A. 1 piece of 10" Sch. 160 SS pipe, incorrect length & heat no., rust, flat spots, dents, scratches & gouges on inside & outside.	Reject		
3021	6-6-80	Cable tray 2BFH01 is shown on 2 separate layout dwgs. E-603 Sh 1 & E-643 Sh 1; E-36 shows 2BFH01 on E-643	Rework Use As Is	7-8-80	H. Tuttle
3022	6-6-80	M-106AC. Item 2, 1 piece #56 constant support spring can has dent in the side of the can.	Use As Is	7-14-80	J. Kramer
3023	6-9-80	Tolerance measurements required by Spec. C-111 (radial locations & slope) have not been taken for the construction opening liner plate sections, since being replaced.	N/A	7-18-80	S. Gelnett
3024	6-10-80	Spec. C-230. Calibration of Admixture vials found to be out of tolerance.	Rework	6-24-80	T. Lieb
3025	6-12-80	M-1.2 B&W QA data package has not been received for vent valve modification parts	Doc. Rework	7-14-80	D. Delaney
3026	6-12-80	F-45139, sockolets. No G-321-D form received with documentation contrary to Spec. M-305 requirement.	Doc Rework	7-29-80	F. Kanchwala
3027	6-12-80	F-45749, nuts, requires spare parts to comply with original Spec. M-123CC & P.O.; this spec. leaves doc. for spare parts indeterminate	Doc Rework	7-29-80	F. Kanchwala
3028	6-12-80	F-46498, nutserts, received on AEO-13002, no statement of conformance received from vendor as required by P.O.	Doc Rework	6-23-80	J. Kramer
3029	6-12-80	F-45721, concentric reducer. Material test report & G-321-D not received from vendor as Spec. M-215.	Doc Rework		
3030	6-12-80	F-46404, 6" tee, marking for "one of the two tees" received on AEO-13094 has been buffed off, marking is illegible.	Rework	6-30-80	F. Kanchwala

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2 NRC NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
3031	6-13-80	Spec. C-230 Water meter has not been calibrated per spec.	Rework	7-22-80	T. Lieb
3032	6-13-80	Portion of the post-tensioning movable gantry is striking some of the vertical grease cans that are on top of the vertical tendons.			
3033	6-17-80	Dwg. C-266, 3/4" anchors installed in locations that are under the min. or exceed max. vert./horiz. edge distance per drawing.			
3034	6-18-80	E-650 Sh 1, E-42. Raceway supports installed contrary to drawing requirements.			
3035	6-20-80	C-2 Tendons were stressed with a gauge whose claibration was indeterminate.			
3036	6-20-80	FSK-M-1HBC-145-1 Vertical #11 rebar cut in excess of spec allowances while drilling for hanger installation			
3037	6-23-80	P. O. M-127A Rev. 12 Valve I.D. requirements are conflictory between the M.R. and vendar drawings			
3038	6-23-80	P-46088 Contrary to Spec. CRD-C588-78A shrinkage of grout is less than its original volume	N/A	7-1-80 6-26-80	B. DeArmond
3039	6-25-80	P.O. F-46833 12 of the 25 cases of paint delivered to jobsite were found to be seeping paint from containers & 1 case was missing	Reject		
3040	6-26-80	Dwg. M-619-5. In the installation of FW 134 heat applied to carbon steel without field welding engineering instructions.			
3041	6-27-80	PQCI SC-1.05 requires that field density of relative densities be retested, contrary to this, 7 have not been retested.			
3042	7-1-80	Material used as welded attachments for component supports as listed on NCR, not purchased from ASME or Bechtel approved suppliers.			
3043	7-1-80	E-45447. Threaded Nelson Studs, no statement of conformance or certificate of compliance submitted by vendar. AEO-i3033	Doc Rework	7-9-80	F. Kanchwala
3044	7-1-80	E-30042. Honey Comb Crushable Element, G-321-D supplied by vendar on AEO-13062 does not have his signature in block 21.	Doc Rework	7-10-80	F. Kanchwala
3045	7-1-80	E-541, Dwg. E-42. Conduit 2BE013, embedded in floor of purge Rm # 703, has been core drilled.	Repair	7-31-80	J. Petrosino
3046	7-2-80	M-104A. Shop fab. c.s. piping has been coated with an unidentified base shop coating contrary to Spec. G-3.			
3047	7-3-80	FSK-M-0HBC-67-1, FSK-M-1HBC-184-1, socket welds installed without cleanliness varification and documentation by QC per Spec. M-204.			
3048	7-9-80	F-46747. Transducers, received on AEO-13114, no statement of conformance submitted by vendar.	Doc Rework		
3049	7-9-80	F-46905. Selector SW Operator, statement of conformance has not been received.	Doc Rework	7-21-80	J. Kramer

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PROJECT NAME¹ Midland JOB NO.¹ 07220 PAGE⁸ 180

2 NRC NO.	3 DATE	4 NONCONFORMANCE DESCRIPTION / REMARKS	5 DISPO.	6 DATE NCR CLOSED	7 CLOSED BY
3050	7-11-80	F-46216. Doors, Dimensions of door when received are not as specified on P.O.	Reject		
3051	7-11-80	F-46108, Item 7, tube steel, heat no. 43894. No certified material test report received for this heat number.			
3052	7-11-80	F-45396. socket weld orifice flange, no quality verification documentation supplied, AEO-13208.	Doc Rework	7-23-80	F. Kanchwala
3053	7-15-80	F-45571, socket head cap screws & nuts, have marking 8 instead of 88c, (hex nuts); marking B8 instead of B8c (cap screws)	Reject		
3054	7-15-80	Spec. C-306. grouted anchor bolt holes for hanger 638-13-6 were drilled in the secondary shield wall without project approval, no concrete drilling permit.	N/A	7-17-80	S. Schumitch
3055	7-11-80	F-45571. Heavy hex nuts to be ASTM A-194 Grade 8C, markings are 8 on hex nuts.	N/A	7-29-80	J. Kramer
3056	7-17-80	Spec. G-27, Dwg. 2-632-1-4, two embeds used for hanger 26" 2ELB-10-H35 were not preheated.			
3057	7-18-80	Spec. A-14. Test sample of the mortar was not taken on the 3rd consecutive working after the first day of masonry work.			
3058	7-21-80	E-20 Spec. Elec. Pene. Module; only 22 cables exist in module 780501-1-06 & terminals X10, 11, 12 could not be identified.			
3059	7-21-80	Spec. C-306. 3 grouted anchor bolt holes for hanger (Sk FSK-M-2ECB-9-1-AH2) drilled in sec. shield wall w/o concrete permit or QC notification.			
3060	7-23-80	Spec. C-208. Contrary to spec. requirements, 4 yds. of C-1 concrete was placed with 3/4" aggregate not meeting project specs.			
3061	7-24-80	C-305. 3/4" anchors installed with center-to-center spacing reduced without prior approval,			
3062	7-25-80	ASTM C 94-78a, admixture vial - WRDA, out of tolerance for ACC C-1 concrete placed 7-24-80.	Rework		
3063	7-25-80	ASTM C 94-78a, concrete aggregate, aggregate out of tolerance.			
3064	7-25-80	ASTM C-31-69. Initial cure of concrete specimens were maintained at a temperature exceeding the required range.			
3065	7-28-80	Dwg. E-755 Sh. 1. Tray support installed with incorrect size fillet weld per FCR E-1990			
3066	7-28-80	Dwg. A-52. Block wall #12 exceeds the height shown on the drawing, detail 8.			
3067	7-29-80	FW #2 on spool IHCC-46-603-13-1, completed w/o QA records to control & identify filler material or weld process, or weld inspection.			
3068	8-1-80	E-26. 600 Volt control cable, no sealing cap on end of cable, sealing cap torn off, insulation jacket torn.			

NCR'S WRITTEN



NONCONFORMANCE REPORT

SU # → Block 16

1. PROJECT NAME Midland Units 1 & 2		JC# NO. 7220	19. NO. 3042	20. PAGE 1 OF 2
2. UNIT(S) Common See Sketches listed in block 16	3. DRAWING/PART NO. NA	4. ITEM DESCRIPTION Welded Attachments	5. ITEM LOCATION see Hanger Sketches	
6. P.O. OR SPEC NO. NA	7. SERIAL NO. NA	8. REPLACEMENT PART P/N: NA REV: NA SER NO.: NA	9. SOURCE Consigli & Ryerson, Paragon, NPS, Federal Pipe & Steel	
11. INSPECTION CRITERIA () DWG () SPEC (X) OTHER	IR NO. ASME Code	12. ASME AUTHORIZED INSPECTION REQ'D <input checked="" type="checkbox"/> YES () NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test () Client (X) Eng () FLD
16. NONCONFORMING CONDITION: Material used as welded attachments for the component supports listed below, ^{was off spec} were not purchased from ASME or Bechtel approved suppliers in accordance with the ASME SEC. III Code. The acceptability of these items is indeterminate.				
24. DISPOSITION CONCURRENCE				
rework		reject	repair	use as is
PROJECT FIELD ENGINEER		PROJECT ENGINEER		DATE
PROJ CONSTR QC ENGINEER		AUTHORIZED INSPECTOR		DATE
25. DISPOSITION RESULTS				
17. REPORTED BY Paul Baker DATE 6-27-80				
18. VALIDATED BY Elk 8-27-80 DATE 8/1/80				
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING () TO OTHERS (SPECIFY)				
22. () Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering				
23. PROJECT ENGINEERING DISPOSITION				
26. QC ACCEPTANCE				
QC ENGINEER				DATE
AUTHORIZED INSPECTOR				DATE

Continued on Pg. 2



Block 16. cont.

Hanger Sketchs

	SU #		SU #		SU #
1.) 604-1-10	2BGE	9.) 619-12-18	1EAC	17) 634-1-24	2ABA
2.) 611-6-11	2BCA	10.) 619-2-9	2EAC	18) 634-1-25	2ABA
3.) 616-9-15	1EGA	11) 619-12-3	1EAC	19) 639-14-1	2ALA
4.) 612-5-31	1BNA	12) 619-14-6	1EAC	20) 616-7-3	1EGA
5.) 618-2-28	OEAA	13) 619-14-13	1EAC	21) 618-2-29	OEAA
6.) 618-2-30	OEAA	14) 632-1-6	2ABA	22) 619-2-3	OEAA
7.) 618-2-31	OEAA	15) 632-1-10	2ABA	23) 618-2-26	OEAA
8.) 619-1-20	2EAC	16) 633-1-2	1ABA	24) 619-5-19	2EAD

This NCR is written against the welded attachments only.
Work in the piping system and remaining parts of the hanger may continue.

All items are @ list.

Twenty - ~~four~~ ^{four} hold tags applied



L.P. WEHNER

NONCONFORMANCE REPORT

S/U CODE INDETERMINANT

1. Project Name MIDLAND		Job No. 7220		19. No. 3043	20. Page 1 of 1		
2. Unit(s) INDETERMINANT	3. Drawing/Part No. N/A	Rev N/A	4. Item Description P.O. 45447 ITEM # 1 270EA. 3/4" x 2 1/2" LONG THREADED NELSON STUD	5. Item Location WAREHOUSE # 1			
6. P.O. Or Spec No. 7220 F-45447	7. Serial No. N/A	8. Replacement Part P/N _____ REV N/A	9. Source SUPPLIER	10. Contractor/Supplier TRW-NELSON CO.			
11. Inspection Criteria <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER		IR NO. R-1-00-13033 NO. 7220 F-45447	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC.G <input type="checkbox"/> CONST <input type="checkbox"/> TEST	15. Equip Furnished By <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD	
16. Nonconforming Condition: PURCHASE ORDER 7220 F-45447 REV. 0 REQUIRES A STATEMENT OF CONFORMANCE AND A CERTIFICATE OF COMPLIANCE FOR THE MATERIAL RECEIVED ON AEO-13033. CONTRARY TO THE ABOVE STATEMENT OF CONFORMANCE AND A CERTIFICATE OF COMPLIANCE HAS NOT BEEN SUBMITTED BY THE VENDOR. HOLD FOR ENGINEERING DISPOSITION. 'Q' NUMBER IS INDETERMINANT. ONE (1) HOLD TAG APPLIED TO THE NON-CONFORMING ITEM.				24. Disposition Concurrence			
				REWORK	REJECT	REPAIR	USE AS IS
				PROJECT FIELD ENGINEER	DATE		
				PROJECT ENGINEER	DATE		
				PROJECT CONSTR QC ENGINEER	DATE		
				AUTHORIZED INSPECTOR	DATE		
17. Reported By J. Kanichwal		Date 6/30/80		18. Validated By [Signature]		Date 7/1/80	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO OTHERS (SPECIFY)					
22. <input type="checkbox"/> Field Engineering Disposition		<input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING					
23. Project Engineering Disposition							
				26. QC Acceptance			
				QC ENGINEER	DATE		
				AUTHORIZED INSPECTOR	DATE		



PAUL GOUGEN

NONCONFORMANCE REPORT

S/U CODE INDETERMINANT

1. Project Name MIDLAND		Job No. 7220		19. No. 3044	20. Page 1 of 1
2. Unit(s) 1#2	3. Drawing/Part No. F-7220-C233A-F-30042-3-3	Rev N/A	4. Item Description HONEY COMB CRUSHABLE ELEMENT		5. Item Location WAREHOUSE #1
6. P.O. Or Spec No. 7220-F-30042 Rev.7	7. Serial No. H/A	8. Replacement Part P/N _____ REV H/A SER NO. _____		9. Source SUPPLIER	10. Contractor/Supplier METALLURGICAL CONSULTANTS
11. Inspection Criteria <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER NO F-30042 REV.7		IR NO R-1-00-13062	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC'G <input type="checkbox"/> CONST <input type="checkbox"/> TEST
15. Equip Furnished By <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD		16. Nonconforming Condition: PURCHASE ORDER 7220 F-30042 REV.7, SPECIFICATION C-233 REV.18 ATTACHMENT 1 REQUIRE: A COMPLETED G-3110 FORM TO ACCOMPANY EACH SHIPMENT. CONTRARY TO THE ABOVE THE VENDOR HAS SUPPLIED A G3210 FORM WITHOUT HIS SA SIGNATURE IN BLOCK 21 FOR THE MATERIAL RECEIVED ON 7/1/80. 13062. HOLD FOR ENGINEERING DISPOSITION. 'Q' NUMBER IS INDETERMINANT. ONE (1) HOLD TAG APPLIED TO THE NON-CONFORMING ITEM.			24. Disposition Concurrence
		REWORK		REJECT	REPAIR
		PROJECT FIELD ENGINEER		DATE	
		PROJECT ENGINEER		DATE	
		PROJECT CONST/QC ENGINEER		DATE	
		AUTHORIZED INSPECTOR		DATE	
17. Reported By Skanchwala Date 6/30/80	18. Validated By [Signature] Date 7/1/80		25. Disposition Results		
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING			
23. Project Engineering Disposition					
		26. QC Acceptance			
		QC ENGINEER		DATE	
		AUTHORIZED INSPECTOR		DATE	

Notified F.E.'s
 Dave Scott
 R. Black

Elect.

See non testable unit

NONCONFORMANCE REPORT

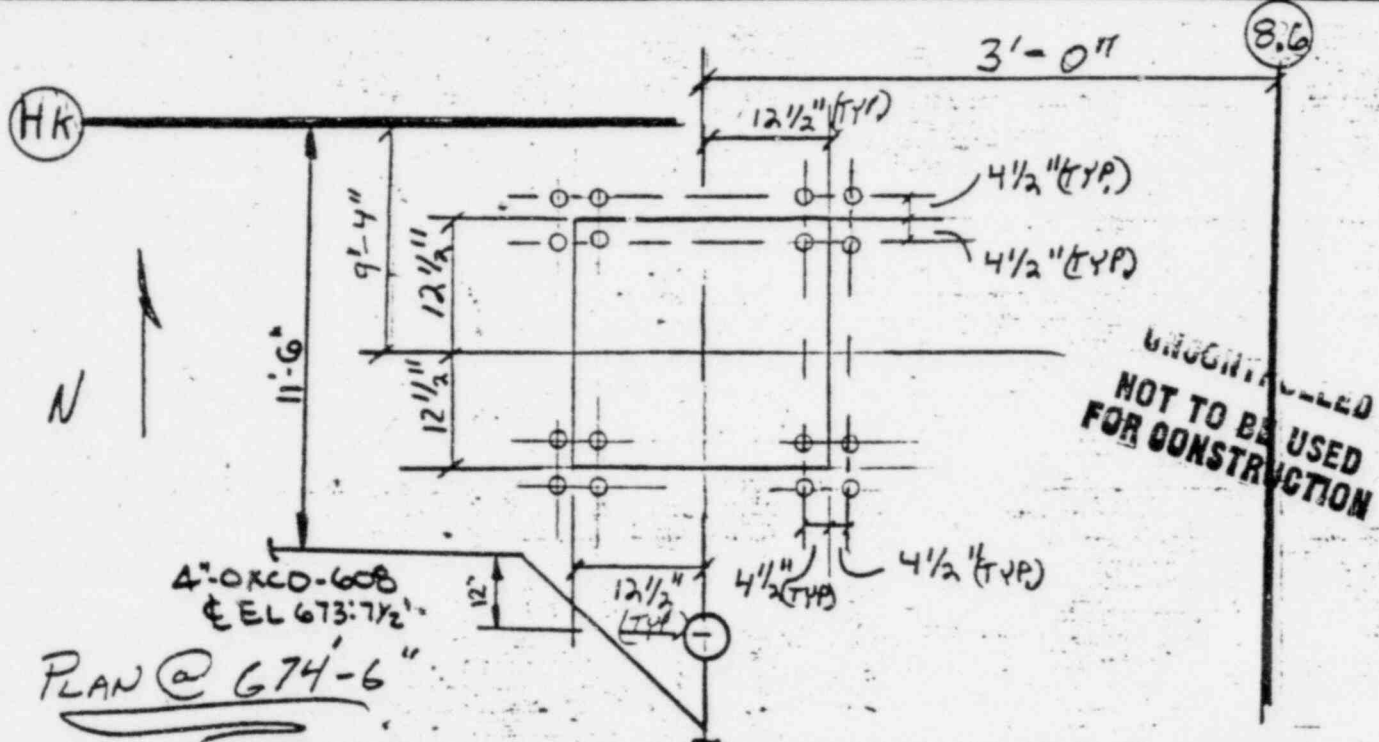
1. Project Name MIGLAND		Job No. 7220		19. No. 3045	20. Page 1 of 1
2. Unit(s) 2	3. Drawing/Part No. E-541	4. Rev 13	4. Item Description Core drilled into G Embedded Conduit		
5. P.O. Or Spec No. N/A	6. Replacement Part P/N N/A REV N/A	7. Serial No. N/A	8. Source CONSTRUCTION	9. Contractor/Supplier N/A	10. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
11. Inspection Criteria <input checked="" type="checkbox"/> DWG <input type="checkbox"/> SPEC	12. IIR NO. 2BE013	13. REV 44	14. Discovered During <input type="checkbox"/> REC:G <input checked="" type="checkbox"/> CONST	15. Equip Finished By <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input checked="" type="checkbox"/> ENG	16. Disposition <input type="checkbox"/> REPAIR <input type="checkbox"/> AS IS
16. Nonconforming Condition: Conduit 2BE013, 4" G.R.S., embedded in Floor of Purge Rm # 703, elev 674'6", above location, has been core drilled. See concrete Drilling Permit # 6458 (Sheet # 2). Concrete has been chipped out in the vicinity of the damaged conduit. See Concrete Drilling Permit # 6861 (Sheet # 3). Dist. 3.006 Hold Fire engineering disposition Date 7-1-80 Validated By [Signature] TO FIELD ENGINEERING <input checked="" type="checkbox"/> TO OTHERS (SPECIFY) <input type="checkbox"/>					
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING					
23. Project Engineering Disposition					
26. QC Acceptance					
QC ENGINEER					
AUTHORIZED INSPECTOR					

CONCRETE DRILLING PERMIT NCR PAGE 2 OF 4

Project 7220 Permit No. 6458 JEP PAGE 1 OF 1
 Prepared By: O. Serrano Discipline: Civil Date 4/8/80
 Unit _____ Bldg. AUX Area _____ Elev. 674'-6"

Location of Q-Listed blockwall or poured wall substituted for Q-Listed blockwall

Resident Engineer approval for attachment to Q-Listed blockwall or poured wall substituted for a Q-Listed blockwall.
 Appv'd _____ Not Appv'd _____ Date _____
 By: _____



PLAN @ 674'-6"

- Notes: (1) SEE LATEST DESIGN DRAWING REVISION AND CHANGE ADDENDA PRIOR TO DRILLING.
 (2) DO NOT CUT REBAR WITHOUT FIELD ENGINEERS APPROVAL. NO REBAR CUTTING IS ALLOWED IN Q-LISTED CONCRETE BLOCKWALLS OR POURED WALLS SUBSTITUTED FOR Q-LISTED CONCRETE BLOCKWALLS.

Specific Instruction and Location Tolerance: DRILL 16 - 2" Ø HOLES

Note: If rebar encountered, notify OAK SIRPINE
6" deep

If ground cable encountered, notify DAVE SCOT
 Before moving hanger, notify _____

Loads per drawing C-2050: (list only for attachments to Q-Listed blockwall, or poured walls substituted for Q-Listed blockwalls)

Reference Drawings: C-1162 rev D

Approved By: (Not required for attachments to Q-listed blockwall or poured walls substituted for Q-listed block walls.)

Civil O. Serrano Date 4/10/80 Piping [Signature] Date 2/10/80
 Elect [Signature] Date 4/9/80 Instru [Signature] Date 4/11/80
 Mech [Signature] Date 4/11/80

Project 7220

Permit No. 6861

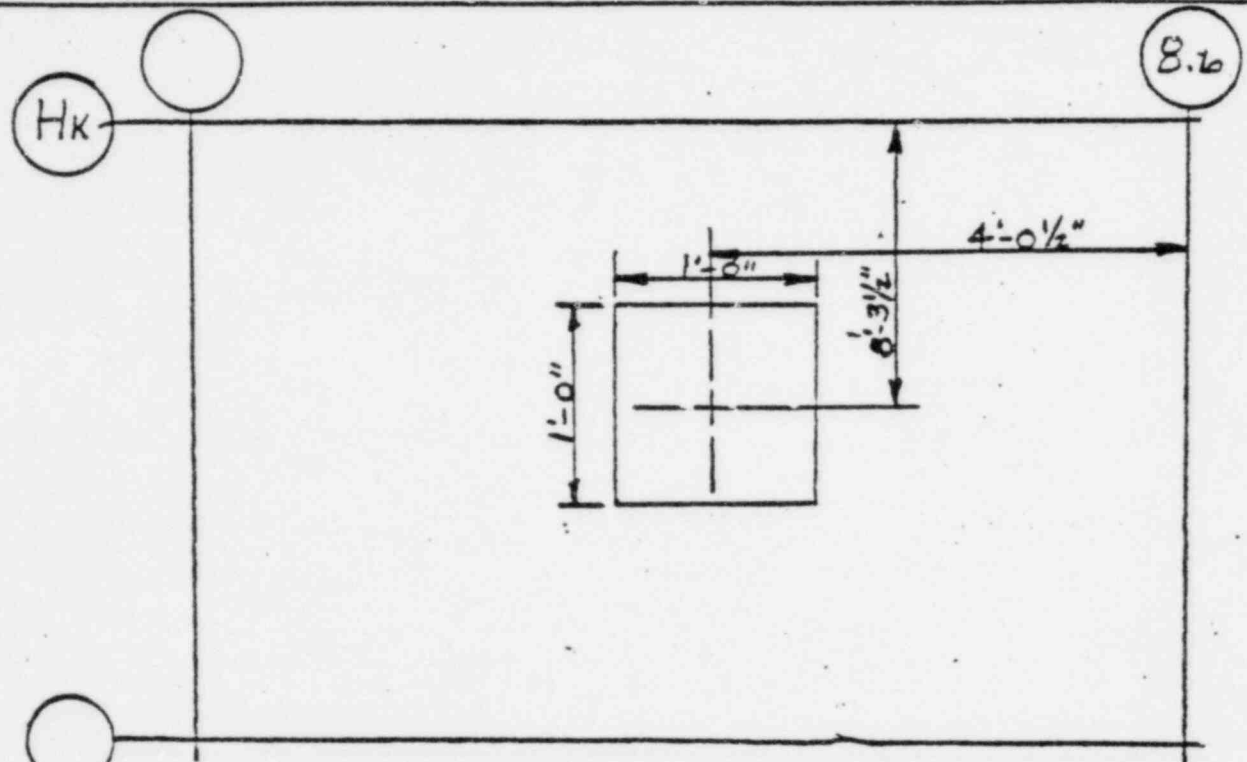
JSP 7-1-80 PAGE 1 OF 1

Prepared By: BRIAN OLDHAM Discipline: CIVIL Date 6/18/80

Unit Common Bldg. Aux Area 2 Elev. 674'-6"

Location of Q-Listed blockwall or poured wall substituted for Q-Listed blockwall
N/A

Resident Engineer approval for attachment to Q-Listed blockwall or poured wall substituted for a Q-Listed blockwall.
Appv'd _____ Not Appv'd _____ Date _____
By: _____



- Notes: (1) SEE LATEST DESIGN DRAWING REVISION AND CHANGE ADDENDA PRIOR TO DRILLING.
 (2) DO NOT CUT REBAR WITHOUT FIELD ENGINEERS APPROVAL. NO REBAR CUTTING IS ALLOWED IN Q-LISTED CONCRETE BLOCKWALLS OR POURED WALLS SUBSTITUTED FOR Q-LISTED CONCRETE BLOCKWALLS.

NCR-3045
Page 3 of 4

Specific Instruction and Location Tolerance: CHIP AREA SHOWN 1' X 1' FOR REPAIR OF

Note: If rebar encountered, notify BRIAN OLDHAM (X334).
 If ground cable encountered, notify _____.
 Before moving hanger, notify _____.

4" GRS CONDUIT. PENETRATION DIRECTLY SOUTH OF AREA SHOWN, MAY BE UTILIZED.
 Loads per drawing C-2050: (list only for attachments to Q-Listed blockwalls or poured walls substituted for Q-Listed blockwalls)

Reference Drawings: RE: DRILL PERMIT # 6458 & RR # C-2501 (ATTACHED)

Approved By: (Not required for attachments to Q-listed blockwall or poured walls substituted for Q-listed block walls.)

Civil B. Oldham Date 6/18/80 Piping [Signature] Date 6/23/80
 Elect [Signature] Date 6-23-80 Instru [Signature] Date 6/24/80
 Mech N/A Date _____

S.U. SYSTEM NO. 11530
 LAYDOWN: C-2501
 FCR NO. C-2501

FIELD CHANGE REQUEST

ISSUING OFFICE: 7220
 DATE: 4-22-80
 PREPARED BY: [Signature]
 CHECKED BY: [Signature]
 APPROVED BY: [Signature]

REASON FOR CHANGE: ALEXANDER BELTS CAN SAFELY BE CUT OR AVOIDED ARE LOCATED TOO CLOSE TO AVAL. PENETRATIONS

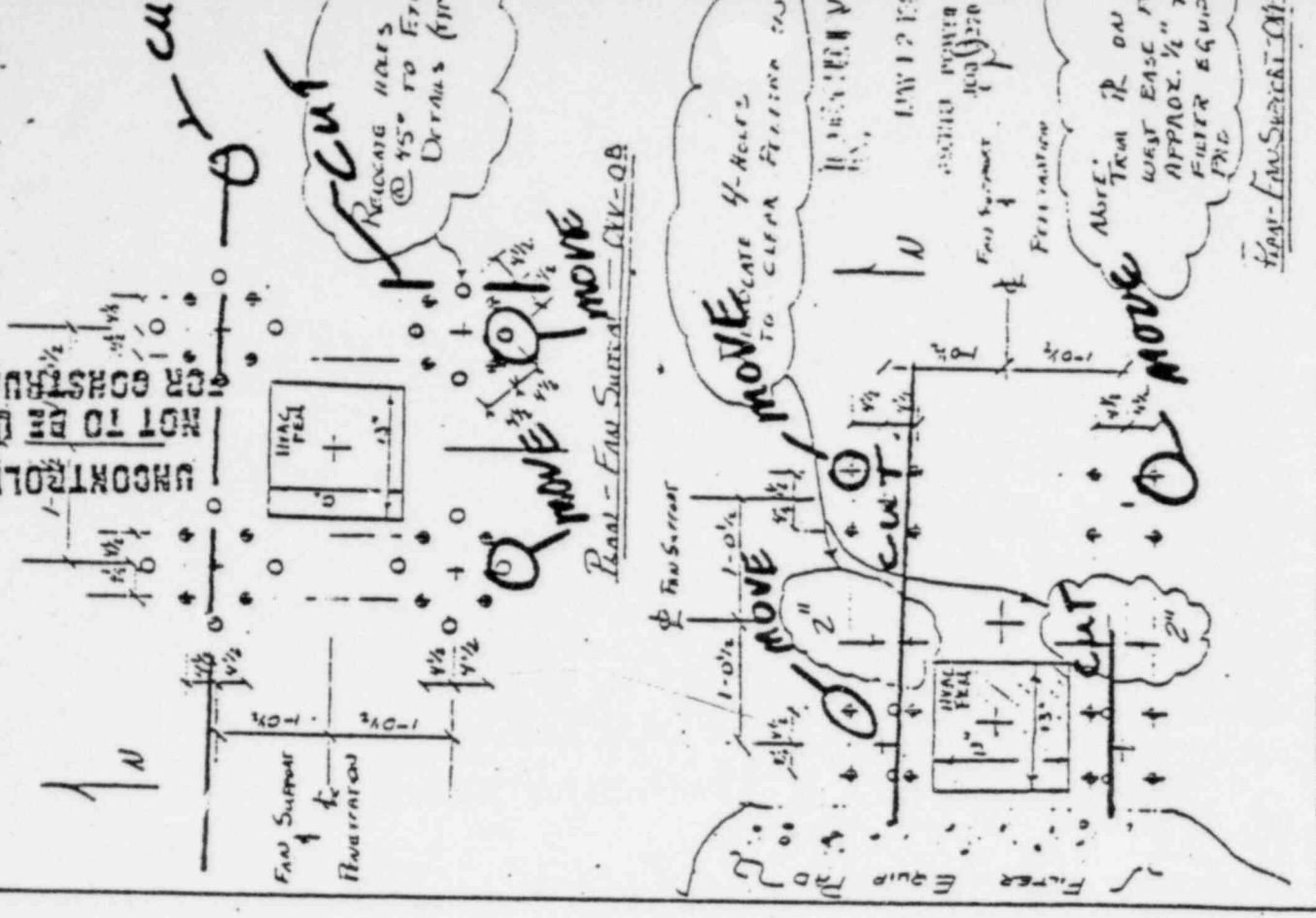
EXISTING CONDITION: ALEXANDER BELTS ARE LOCATED AROUND HVAC FLOOR PENETRATION PER DETAILS ON DWG - CHCZ. A FEW OF THE ANCHOR BOLTS LOCATIONS ARE TOO CLOSE TO THE PENETRATIONS AS SHOWN

DESCRIPTION OF CHANGE: FIELD REQUEST TO RELOCATE HVAC ANCHOR BOLTS TO THE NEW LOCATION AS SHOWN.

RECEIVED
 MAY 12 1980
 WHEELER POWER CORP.
 JOB # 100

INTERIM APPROVAL BY RESIDENT ENGINEER:	DATE:	SIGNATURE:	DATE:
[Signature]	4-22-80	[Signature]	4-22-80

APPROVED: YES NO
 PROJECT NUMBER: [Blank]
 SIGNATURE AND DATE: [Signature] 4/22/80
 REMARKS: DWG Change required. See drawings 1150



PLAN - FAN SUPPORT - CIV-08



ENG. R. KOWALSKI

NONCONFORMANCE REPORT

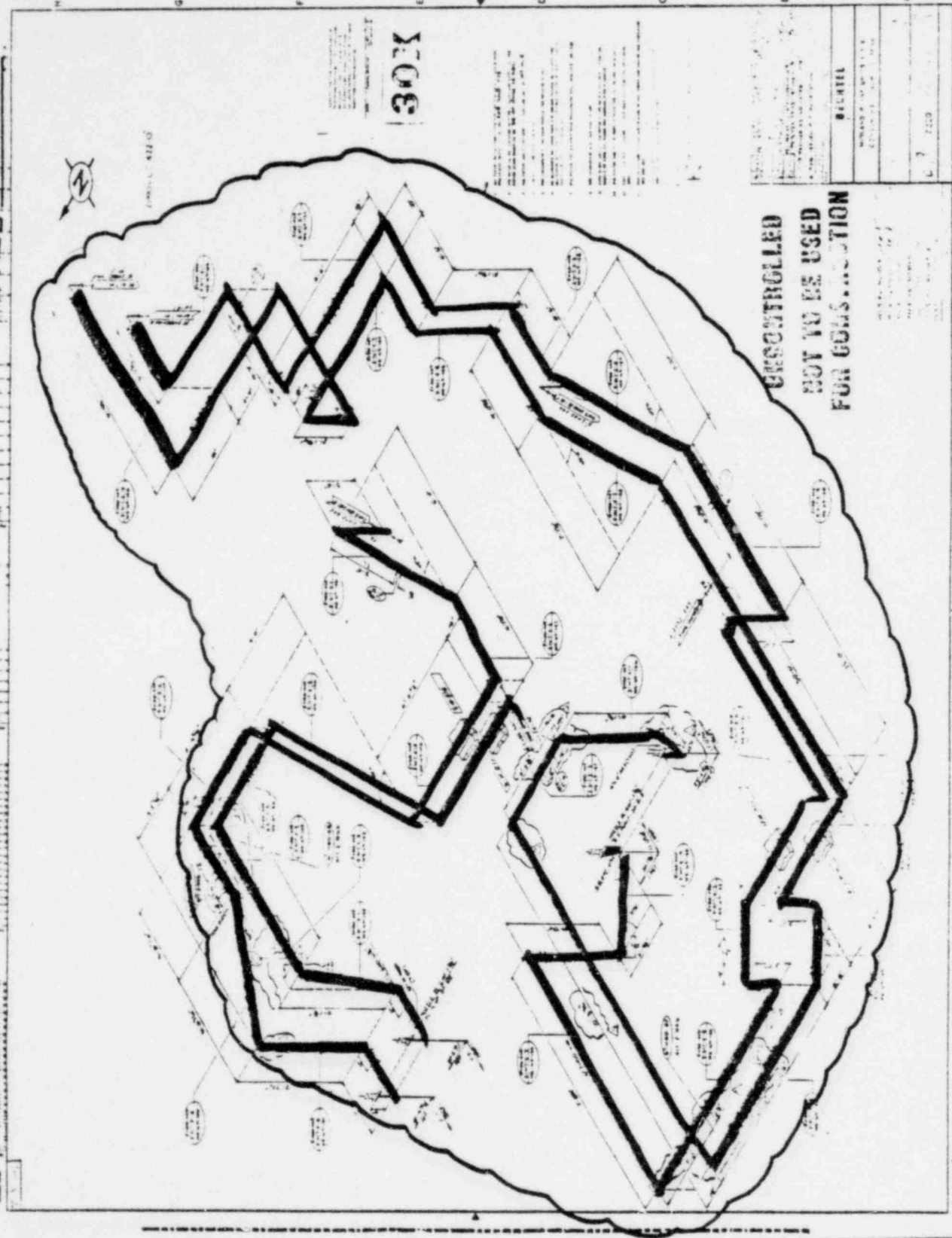
3/0 - NON TESTABLE

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 3046	20. PAGE 1 OF 14
2. UNIT(S) 1E2	3. DRAWING/PART NO. N/A	4. ITEM DESCRIPTION Shop Fabricated Carbon Steel Piping	5. ITEM LOCATION Containments 1 & 2		
6. P.O. # 7220-M-104A-AC	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER ITT Grinnell Industrial Piping, Inc.	
11. INSPECTION CRITERIA () DWG (X) SPEC () OTHER	IR NO. NO. G-3 Rev. 7	12. ASME AUTHORIZED INSPECTION REC'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client () Eng (X) FLD
16. NONCONFORMING CONDITION: Purchase Order 7220-M-104A-AC specifies that carbon steel piping that is to be installed within the containments shall be coated in accordance with Specification 7220-G-3, system A, which requires a one coat application of an approved inorganic zinc rich shop primer. Contrary to the above the piping indicated on the attached mechanical drawings has been coated with an unidentified lead					
REPORTED BY R.D. Kowalski	DATE 7/1/80	VALIDATED BY [Signature]	DATE 7/1/80	25. DISPOSITION RESULTS	
21. ROUTING: () TO FIELD ENGINEERING () TO OTHERS (SPECIFY)					
22. () Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
24. DISPOSITION CONCURRENCE					
rework	reject	repair	use as is		
PROJECT FIELD ENGINEER	DATE	PROJECT ENGINEER	DATE	PROJ CONSTR QC ENGINEER	DATE
AUTHORIZED INSPECTOR	DATE				
26. QC ACCEPTANCE					
QC ENGINEER	DATE				
AUTHORIZED INSPECTOR	DATE				



Block 16 continued:

Inse Shop coating. Hold for Engineering Disposition. Q-number is indeterminate.
No hold tags applied.



DWG. M-617 SH.2 (A) REV. 4
REACTOR BLDG UNIT 2



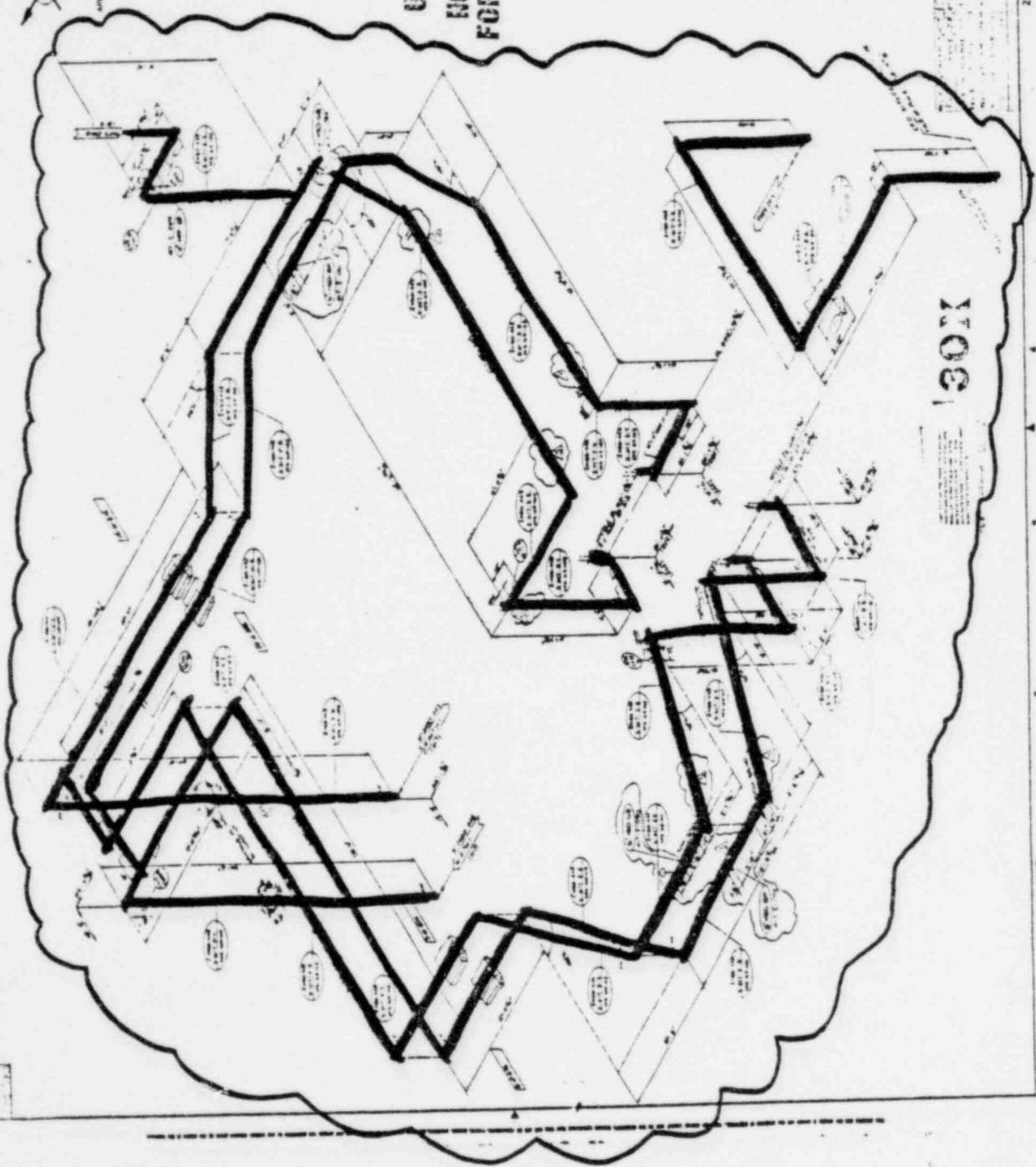
APPENDIX L.F. 433

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FOR CONSTRUCTION

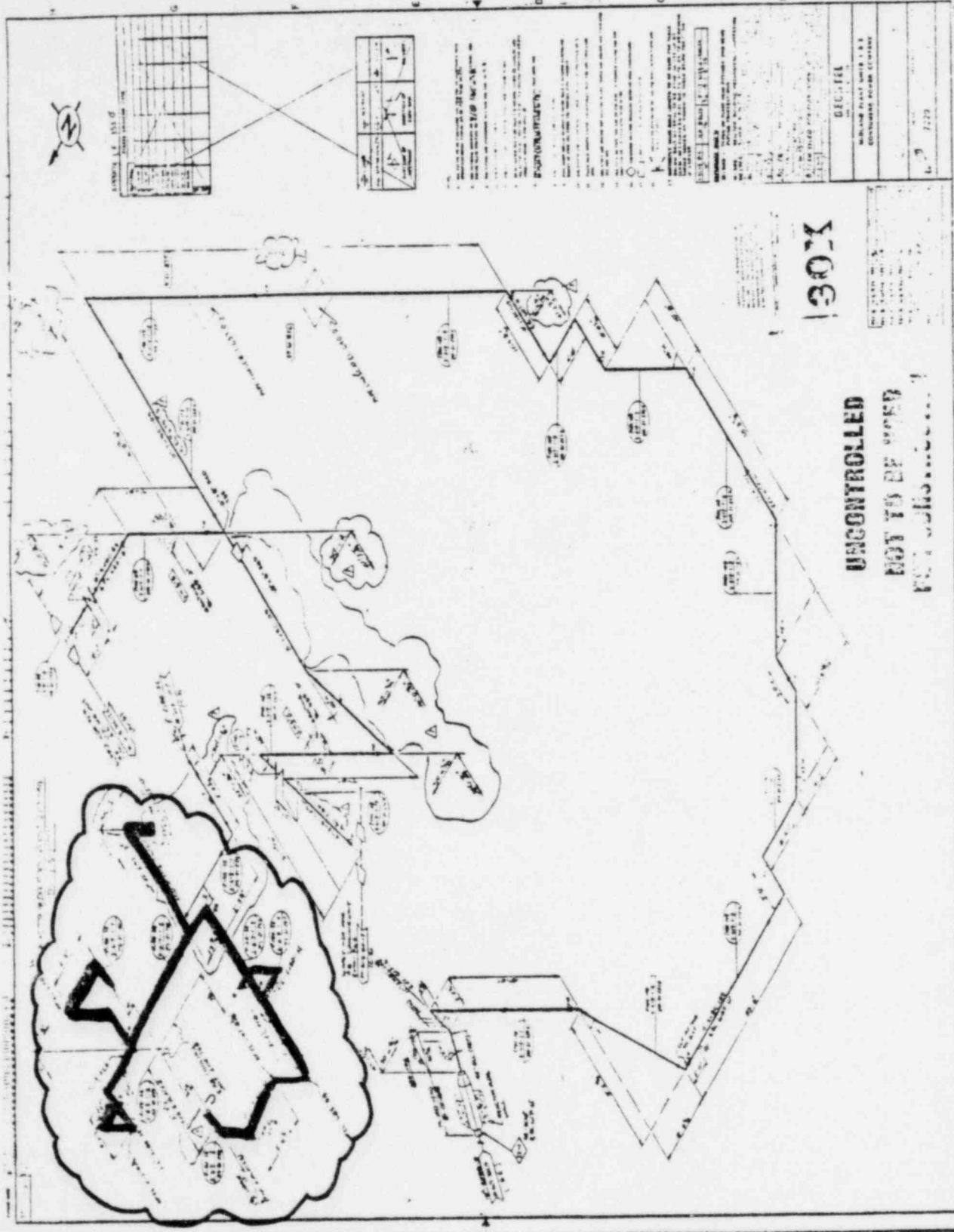
- 1. THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.
- 2. THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.
- 3. THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.
- 4. THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.
- 5. THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.
- 6. THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.
- 7. THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.
- 8. THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.
- 9. THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.
- 10. THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.

THIS DRAWING IS THE PROPERTY OF THE U.S. GOVERNMENT AND IS LOANED TO YOU BY THE U.S. GOVERNMENT. IT IS TO BE USED ONLY FOR THE PURPOSES FOR WHICH IT WAS ISSUED AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM THE U.S. GOVERNMENT.

REVISIONS	
NO.	DESCRIPTION
1	ISSUED FOR CONSTRUCTION
2	ISSUED FOR CONSTRUCTION
3	ISSUED FOR CONSTRUCTION
4	ISSUED FOR CONSTRUCTION
5	ISSUED FOR CONSTRUCTION
6	ISSUED FOR CONSTRUCTION
7	ISSUED FOR CONSTRUCTION
8	ISSUED FOR CONSTRUCTION
9	ISSUED FOR CONSTRUCTION
10	ISSUED FOR CONSTRUCTION



DWG. M-617 SH. 3 (A) REV. 4
 REACTOR BLDG. UNIT 2



130X

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NOT TO BE USED
FOR DISSEMINATION

REVISIONS

NO.	DESCRIPTION	DATE

LEGEND

SYMBOL	DESCRIPTION

GENERAL NOTES

1. ALL DIMENSIONS ARE IN FEET AND INCHES.
2. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE BUILDING CODES AND REGULATIONS.
3. ALL MATERIALS SHALL BE OF THE HIGHEST QUALITY AND SHALL BE APPROVED BY THE ARCHITECT.
4. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
5. ALL WORK SHALL BE SUBJECT TO INSPECTION AND APPROVAL BY THE ARCHITECT.
6. ALL WORK SHALL BE SUBJECT TO THE SUPERVISION OF THE ARCHITECT'S REPRESENTATIVE.
7. ALL WORK SHALL BE SUBJECT TO THE SUPERVISION OF THE ARCHITECT'S REPRESENTATIVE.
8. ALL WORK SHALL BE SUBJECT TO THE SUPERVISION OF THE ARCHITECT'S REPRESENTATIVE.
9. ALL WORK SHALL BE SUBJECT TO THE SUPERVISION OF THE ARCHITECT'S REPRESENTATIVE.
10. ALL WORK SHALL BE SUBJECT TO THE SUPERVISION OF THE ARCHITECT'S REPRESENTATIVE.

DESIGNED BY: [Name]

DATE: [Date]

SCALE: [Scale]

PROJECT: [Project Name]

CLIENT: [Client Name]

ARCHITECT: [Firm Name]

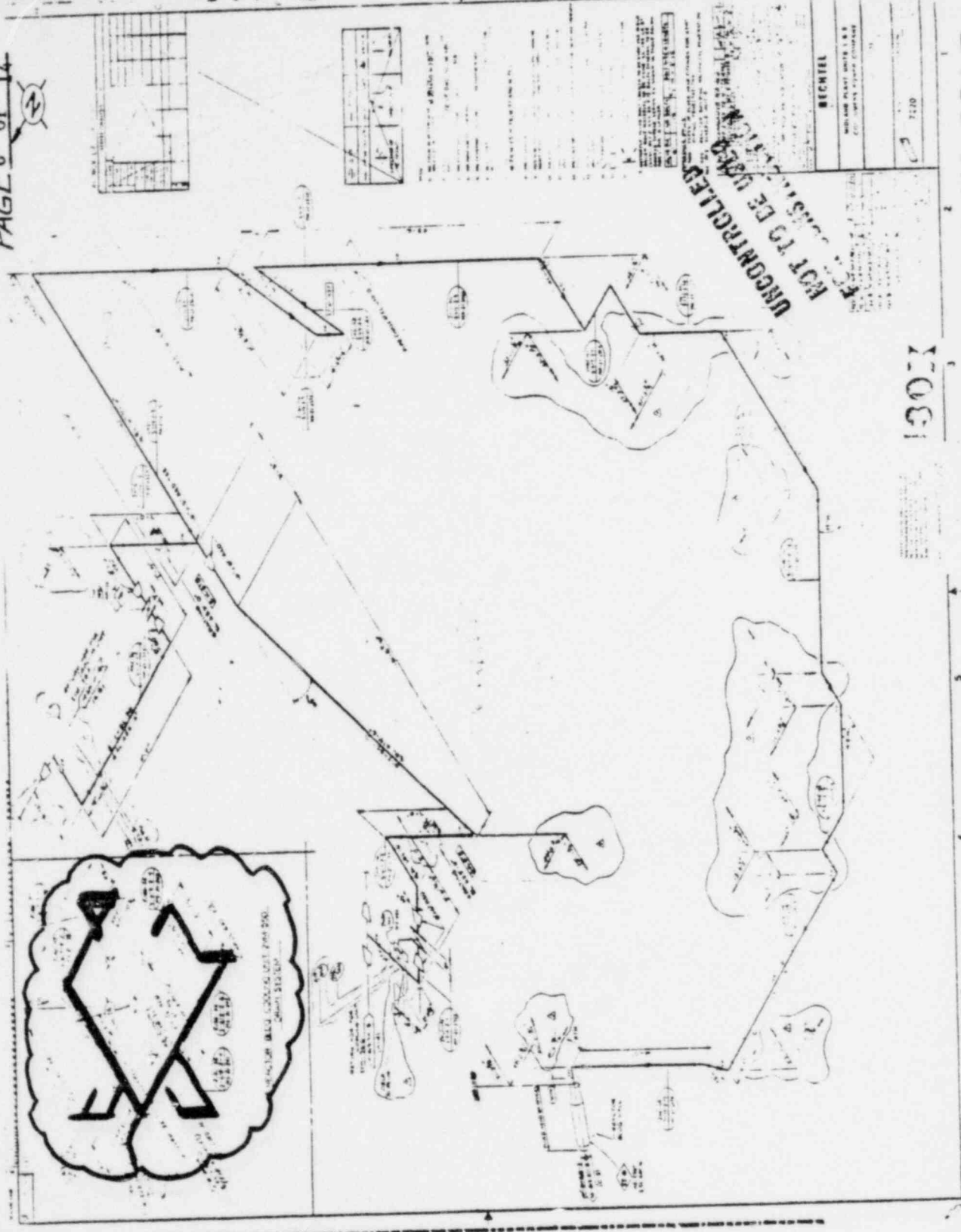
SECURE

NO. [Number]

DATE [Date]

BY [Name]

DWG. M-619 SH. 1 (Q) REV. 6
REACTOR BLDG. UNIT 2



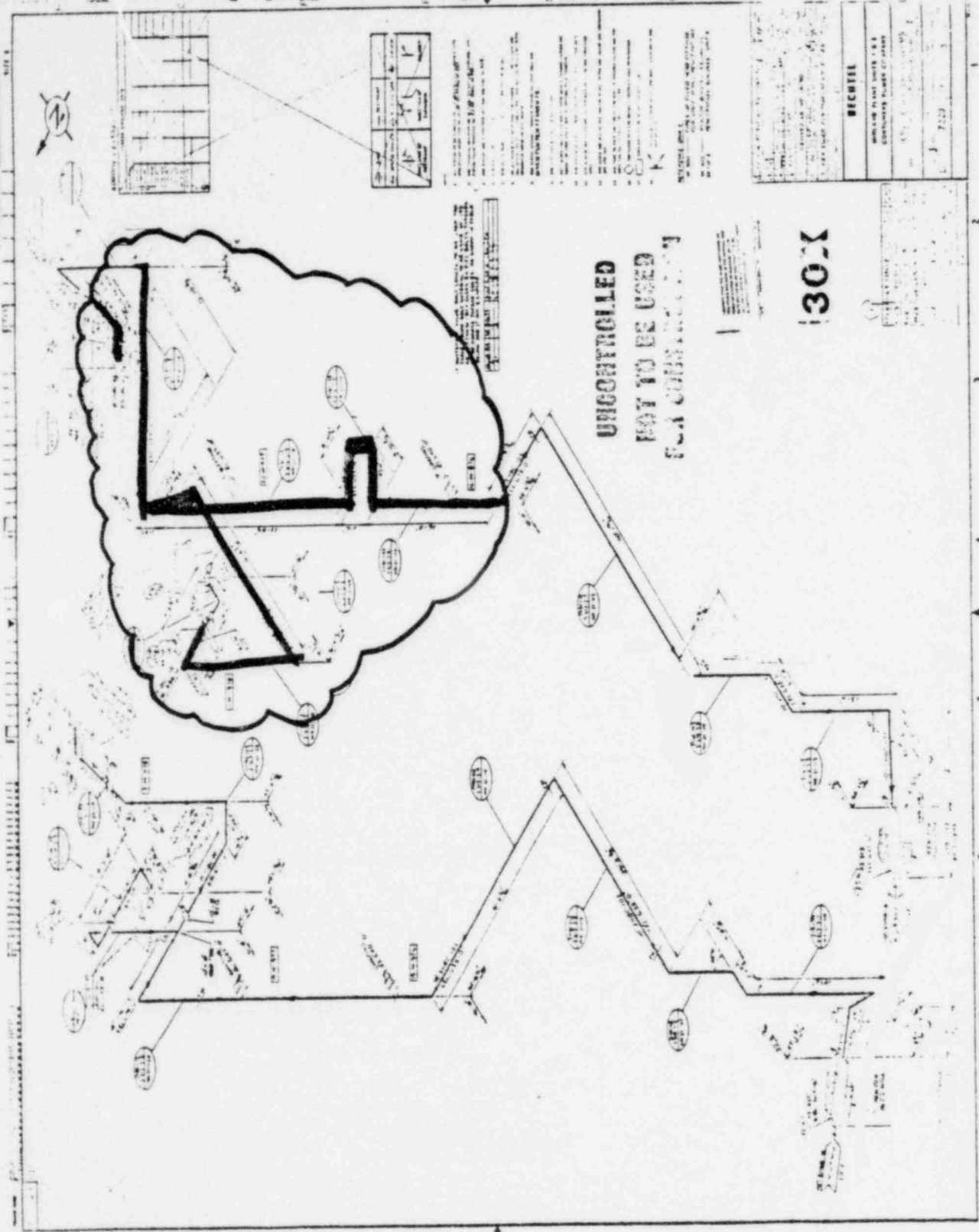
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DWG. M-619 SH. 2 (Q) REV. 7

REACTOR BLDG. UNIT 2

RECHTEL

REVISION	DATE	BY



DWG M-619 SH.3 (Q) REV. 7
REACTOR BLDG. UNIT 2



APPENDIX L OF 304

3046

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NOT TO BE USED

REACTOR BUILDING UNIT (RBU) 50A
DRAIN SYSTEM

REACTOR BUILDING COOLING UNIT (RBCU) 50B
METHANE SYSTEM

REACTOR BUILDING COOLING UNIT (RBCU) 50C
METHANE SYSTEM

REACTOR BUILDING COOLING UNIT (RBCU) 50D
METHANE SYSTEM

REACTOR BUILDING COOLING UNIT (RBCU) 50E
METHANE SYSTEM

REACTOR BUILDING COOLING UNIT (RBCU) 50F
METHANE SYSTEM

REACTOR BUILDING COOLING UNIT (RBCU) 50G
METHANE SYSTEM

REACTOR BUILDING COOLING UNIT (RBCU) 50H
METHANE SYSTEM

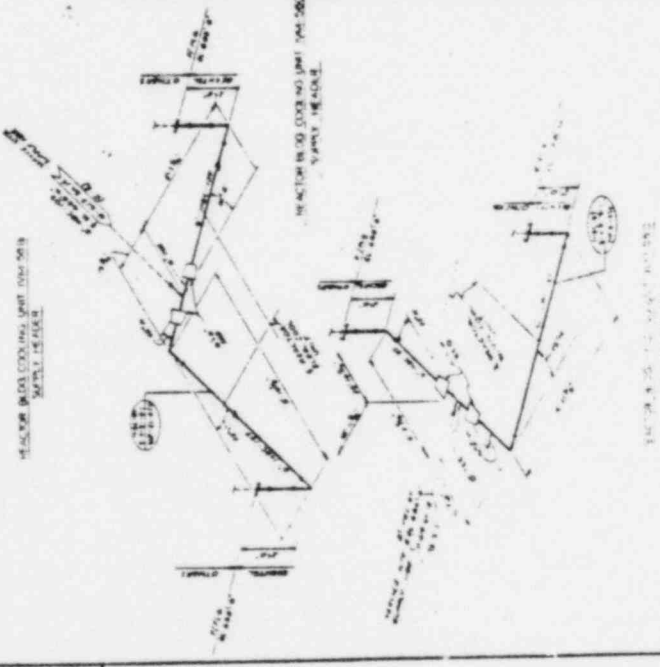
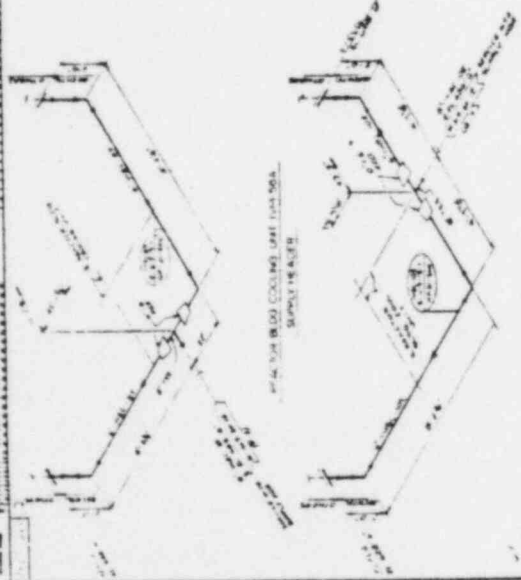
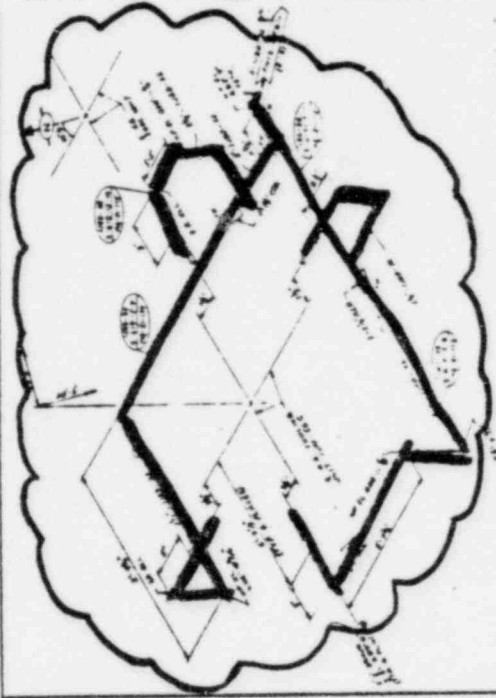
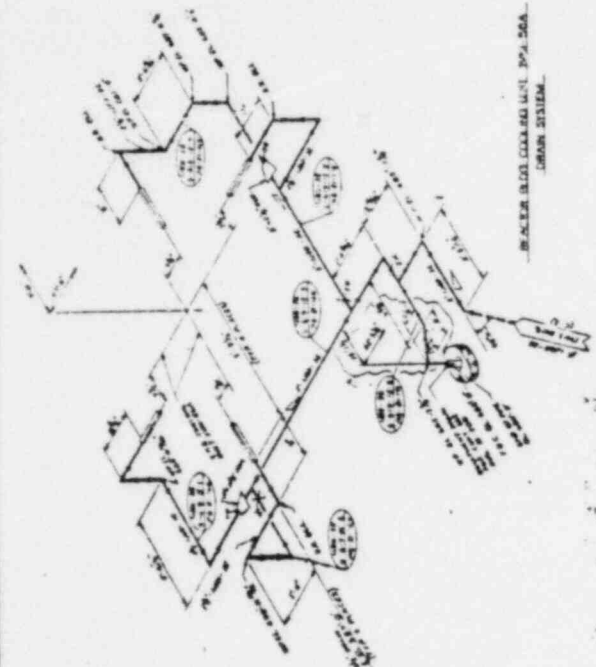
REACTOR BUILDING COOLING UNIT (RBCU) 50I
METHANE SYSTEM

REACTOR BUILDING COOLING UNIT (RBCU) 50J
METHANE SYSTEM

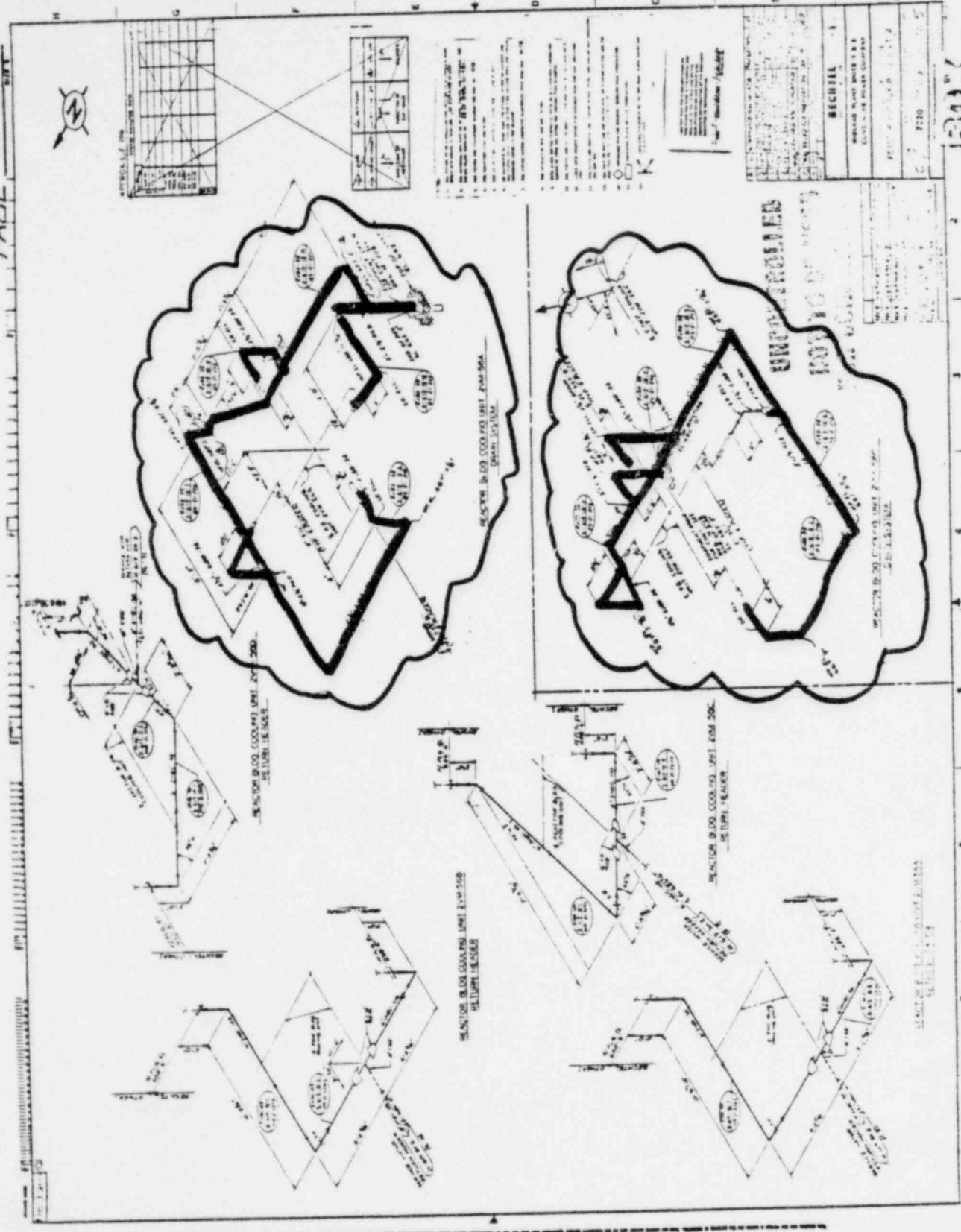
REACTOR BUILDING COOLING UNIT (RBCU) 50K
METHANE SYSTEM

SECRET

REACTOR BUILDING UNIT 50A
DRAIN SYSTEM



DWG. M-619 SH. 15 (A) REV. 5
REFLECTOR BLDG. UNIT 1



DWG. M-619 SH. 18 (A) REV. 5
 REACTOR BLDG UNIT 2

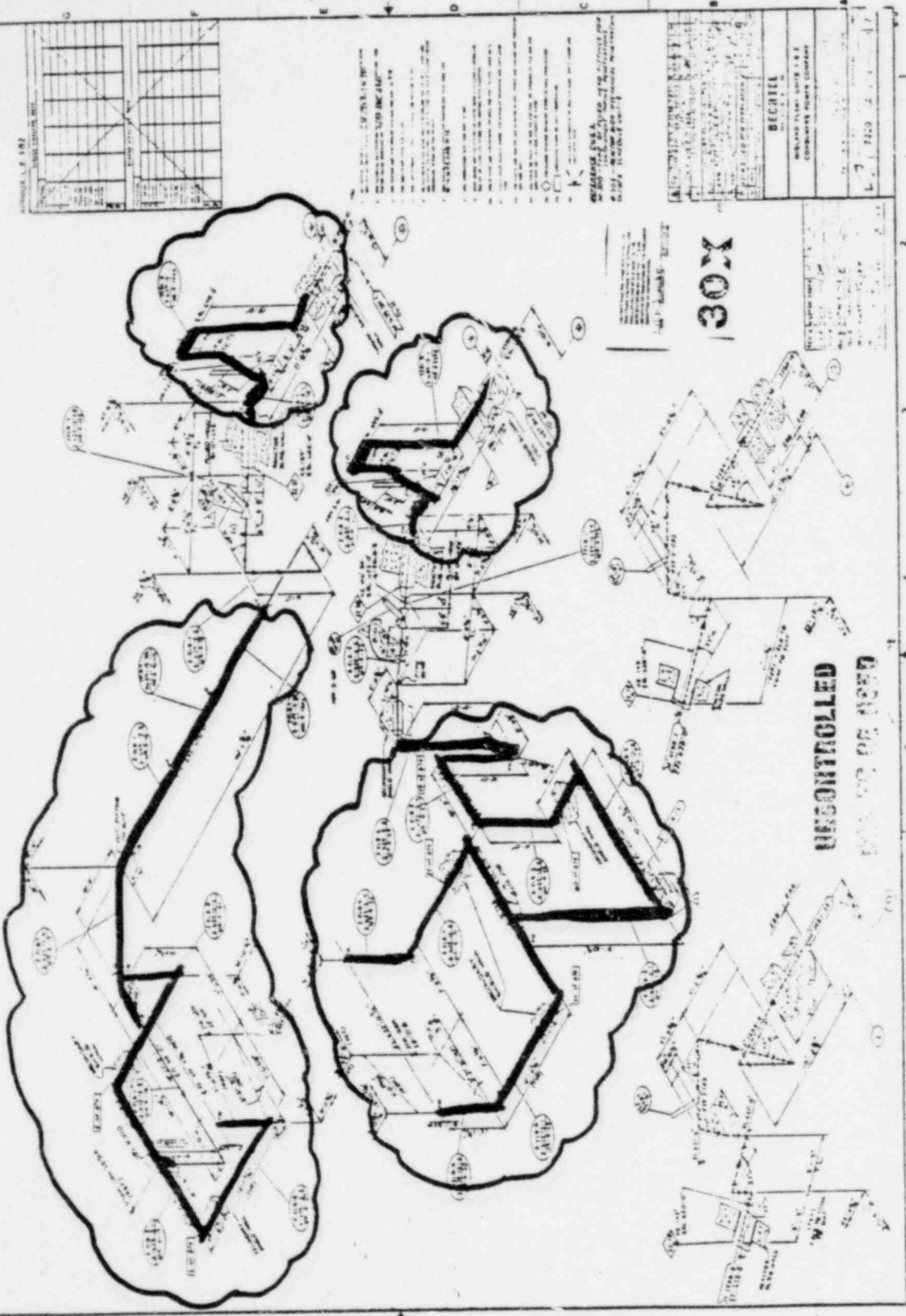


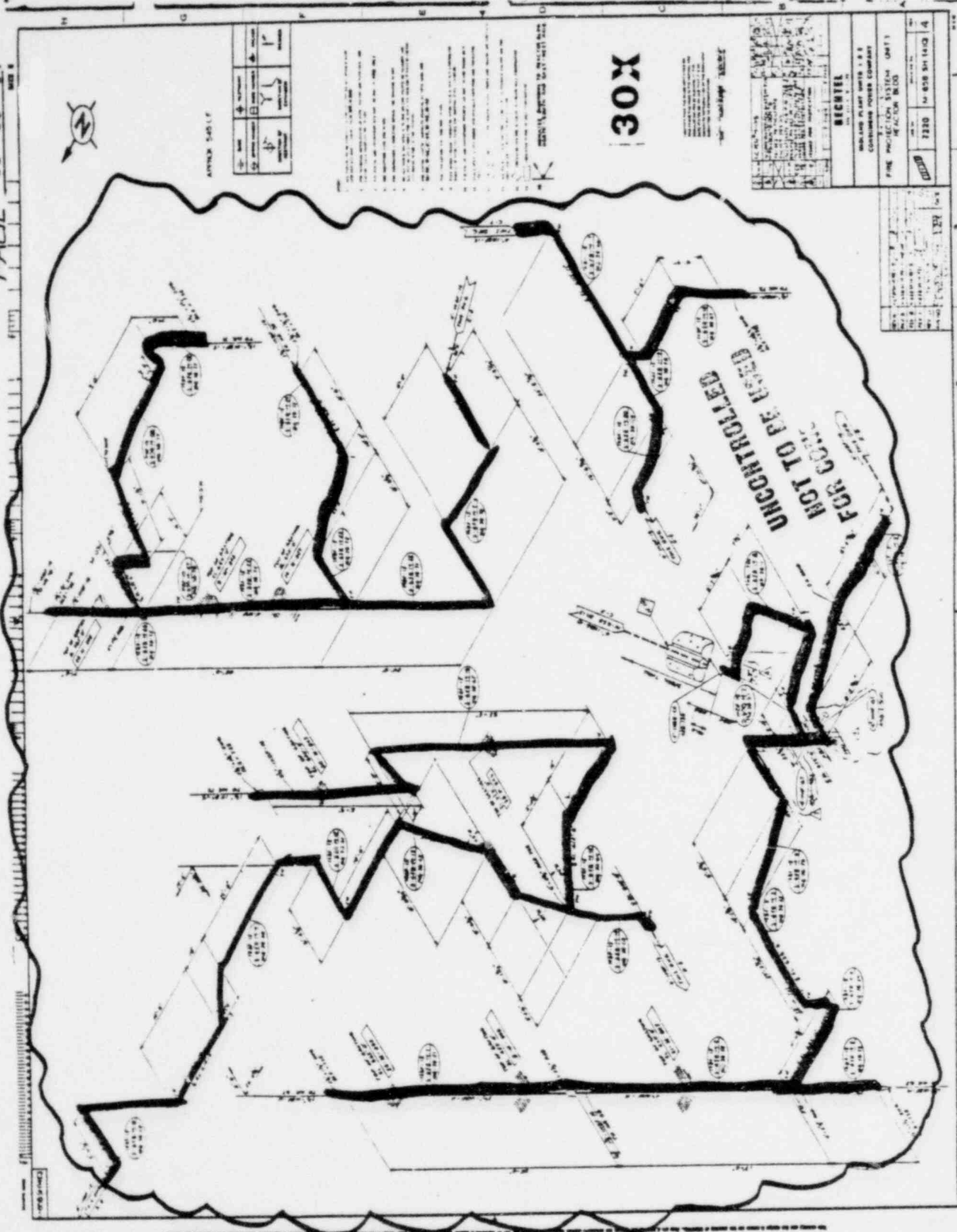
TABLE 1.1

NO.	DESCRIPTION	DATE
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2		
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7		
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10		

REVISIONS

NO.	DESCRIPTION	DATE
1		
2		
3		
4		
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10		

DWG. M-1039 SH. 13 (Q) REV. 6
REACTOR BLDG. UNIT 2



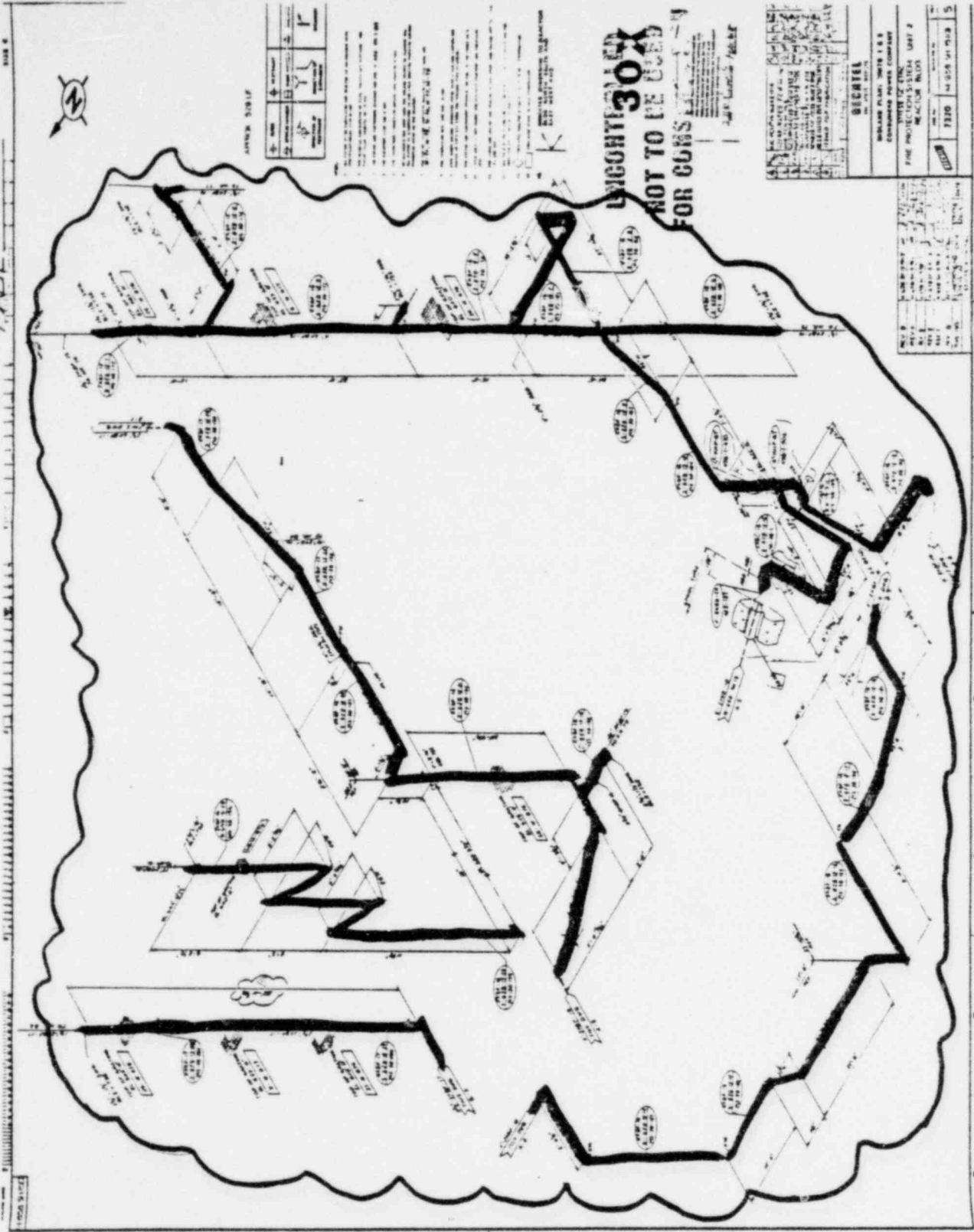
30X

APPROX SCALE 1"

NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR CONSTRUCTION	10/1/68	J. J. [unclear]
2	REVISION	10/1/68	J. J. [unclear]
3	REVISION	10/1/68	J. J. [unclear]
4	REVISION	10/1/68	J. J. [unclear]
5	REVISION	10/1/68	J. J. [unclear]
6	REVISION	10/1/68	J. J. [unclear]
7	REVISION	10/1/68	J. J. [unclear]
8	REVISION	10/1/68	J. J. [unclear]
9	REVISION	10/1/68	J. J. [unclear]
10	REVISION	10/1/68	J. J. [unclear]
11	REVISION	10/1/68	J. J. [unclear]
12	REVISION	10/1/68	J. J. [unclear]
13	REVISION	10/1/68	J. J. [unclear]
14	REVISION	10/1/68	J. J. [unclear]

REVISIONS	
NO.	DESCRIPTION
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2	REVISION
3	REVISION
4	REVISION
5	REVISION
6	REVISION
7	REVISION
8	REVISION
9	REVISION
10	REVISION
11	REVISION
12	REVISION
13	REVISION
14	REVISION

DWG M-658 SH. 14 (Q) REV. 3
 REACTOR BLDG LIMIT 1



DWG. M-658 SH. 15(Q) REV. 4
REACTOR BLDG. UNIT 2

ARCHIT. TITLE

NO.	DATE	BY	CHKD.
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

REVISIONS

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

LIGHTS 30X
NOT TO BE USED
FOR CBS

SECRET

WORKING PLAN: UNIT 1 & 2
CONTAINER PLANT COMPANY
FINE PROTECTION SYSTEM UNIT 2
REACTOR BLDG.

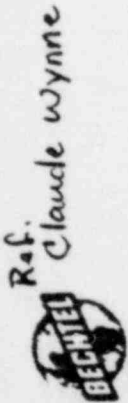
DATE: 11/15/58
BY: [Signature]
CHKD.: [Signature]



NONCONFORMANCE REPORT

S/4 IGJA

1. PROJECT NAME <i>Midland</i>		JOB NO. <i>7220</i>		19. NO. <i>3047</i>	20. PAGE <i>1</i> OF <i>1</i>		
2. UNIT(S) <i>1</i>	3. DRAWING/PART NO. <i>FSK-M-0HBC-67-1</i> <i>FSK-M-1HBC-184-1</i>	REV <i>0</i>	4. ITEM DESCRIPTION <i>2" and 1" Socket Welds</i>	5. ITEM LOCATION <i>Aux</i>			
6. P.O. OR SPEC NO. <i>NA</i>	7. SERIAL NO. <i>NA</i>	8. REPLACEMENT PART P/N <i>NA</i> REV <i>NA</i> SER NO. <i>NA</i>	9. SOURCE <i>Const.</i>	10. CONTRACTOR/SUPPLIER <i>NA</i>			
11. INSPECTION CRITERIA <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. <i>FSK-M-5HBC-67-1</i> NO. <i>P119-FSK-M-1HBC-184-1-1</i>	12. ASME AUTHORIZED INSPECTION REQ'D <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Re'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip Furnished By <input type="checkbox"/> Client <input type="checkbox"/> Eng <input checked="" type="checkbox"/> FLD	
16. NONCONFORMING CONDITION: <i>Requirement: Spec. M 204 states in part, Prior to installation all piping shall be visually checked for cleanliness. Condition: The following socket welds were installed without cleanliness verification and documentation by QC, socket welds 65-66-67-68 on dwg FSK-M-1HBC-184-1 A and socket weld 2001 on dwg FSK-M-0HBC-67-1 A. Cleanliness level is D for installation.</i>				24. DISPOSITION CONCURRENCE			
				<input type="checkbox"/> rework	<input type="checkbox"/> reject	<input type="checkbox"/> repair	<input type="checkbox"/> use as is
				PROJECT FIELD ENGINEER _____ DATE _____			
				PROJECT ENGINEER _____ DATE _____			
				PROJ CONSTR QC ENGINEER _____ DATE _____			
				AUTHORIZED INSPECTOR _____ DATE _____			
17. REPORTED BY <i>W. R. Smith</i>		DATE <i>6/30/80</i>	18. VALIDATED BY <i>[Signature]</i>		DATE <i>7/3/80</i>		
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)							
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering							
23. PROJECT ENGINEERING DISPOSITION							
25. DISPOSITION RESULTS							
26. QC ACCEPTANCE							
				QC ENGINEER _____ DATE _____			
				AUTHORIZED INSPECTOR _____ DATE _____			

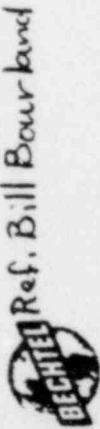


Ref. Claude Wynne

NONCONFORMANCE REPORT

Start up code: Indeterminate

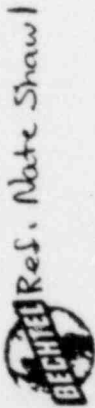
1. Project Name Midland		Job No. 07220		19. No. 3049	20. Page 1 of 1
2. Unit(s) IND	3. Drawing/Part No. NA	Rev NA	4. Item Description Selector sw operator	5. Item Location QC HOLD AREA	
6. P.O. Or Spec No. F46905	7. Serial No. NA	8. Replacement Part P/N NA REV NA	9. Source Beach Catalog CR294045200	10. Contractor/Supplier General Electric Supply Co.	
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC	IR NO. R-100-13186	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC:G <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD	
16. Non-conforming Condition: Purchase Order 7220-F46905 requires a statement of Conformance as Quality Verification Documentation Submittal. Contrary to this, NO Statement of Conformance has been received. Hold tag applied "Q" number is indeterminate Hold Pending final disposition					
17. Reported By John Kramer		Date 7/9/80		18. Validated By John Kramer 7/9/80	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO OTHERS (SPECIFY)	
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING					
23. Project Engineering Disposition					
REWORK		REJECT	REPAIR	USE AS IS	
PROJECT FIELD ENGINEER		PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		AUTHORIZED INSPECTOR		DATE	
25. Disposition Results					
26. QC Acceptance					
QC ENGINEER		AUTHORIZED INSPECTOR		DATE	



Ref. Bill Bourland

NONCONFORMANCE REPORT Start up Code Indeterminats

1. Project Name Midland		Job No. 07220		19. No. 3050	20. Page 1 of 1
2. Unit(s) IND.	3. Drawing/Part No. NA	4. Item Description P.O. item # 8, 4 each, Doors		5. Item Location QC. HOLD AREA WAREHOUSE 1	
6. P.O. Or Supplier No. F-46216 rev 1	7. Serial No. NA	8. Replacement Part P/N NA	9. Source Supplier	10. Contractor/Supplier Gould-Brown-Boveri	
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC	IR NO. R-100-13245	12. ASME AUTHORIZED INSPECTION PERIOD <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	15. Equip Furnished By <input type="checkbox"/> REC-G <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input checked="" type="checkbox"/> ENG <input type="checkbox"/> FLD	
16. Nonconforming Condition. Purchase Order number 7220-F-46216 requires for item number 8, 4 each 14" wide x 11 7/8" High doors. Contrary to this, upon inspection the doors were found to be 15 3/8" wide rather than 14" wide as ordered. "Q" number is indeterminate. Hold tag applied. Hold Pending final disposition.					
17. Reported By John Higgins		Date 7/10/80		18. Validated By D.A. Wasserman 7/10/80	
21. Reporting <input type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO OTHERS (SPECIFY)			
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING					
23. Project Engineering Disposition					
24. Disposition Concurrence					
REWORK	REJECT	REPAIR	USE AS IS		
PROJECT FIELD ENGINEER		DATE			
PROJECT ENGINEER		DATE			
PROJECT CONSTR QC ENGINEER		DATE			
AUTHORIZED INSPECTOR		DATE			
25. Disposition Results					
26. QC Acceptance					
QC ENGINEER		DATE			
AUTHORIZED INSPECTOR		DATE			



Res. Nate Shawl

NONCONFORMANCE REPORT

Start up Code: Indeterminate

1. Project Name Midland		Job No. 07220	19. No. 3051	20. Page 1 of 1
2. Unit(s) IND.	3. Drawing/Part No. NA	4. Item Description 8" x 12" x 1/2" ASTM A-500 Gr B Tube Steel	5. Item Location Standish Fab Shop	
6. P.O. # F46108 rev 1	7. Serial No. NA	8. Replacement Part P/N NA REV 3	10. Contractor/Supplier Carbon Steel Products.	
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC	IR NO. R-100-12184	9. Source Supplier	14. Disccovered During <input type="checkbox"/> R/C <input type="checkbox"/> G <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input checked="" type="checkbox"/> ENG <input type="checkbox"/> FIELD	
16. Nonconforming Condition: Purchase Order number 7220-F46108 requires all material to be marked with heat number traceable to a certified material test report. Contrary to this, for item number 7, 100' of 8" x 12" x 1/2" tube steel, 3 of 5 20' lengths were marked with heat number 43894. No certified material test report has been received for this heat number. Heat number is indeterminate. 3 Hold tags applied. Hold Pending final disposition.				
17. Reported By John Kramer	Date 7/10/80	18. Validated By W. K. Krummen	Date 7/10/80	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)				
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering				
23. Project Engineering Disposition				
24. Disposition Concurrence				
REWORK	REJECT	REPAIR	USE AS IS	
PROJECT FIELD ENGINEER	DATE	PROJECT ENGINEER	DATE	
PROJECT CONSTR QC ENGINEER	DATE	AUTHORIZED INSPECTOR	DATE	
25. Disposition Results				
26. QC Acceptance				
QC ENGINEER	DATE	AUTHORIZED INSPECTOR	DATE	

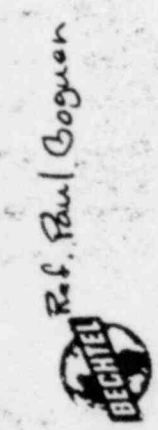


LIRA SIMANOVSKY

NONCONFORMANCE REPORT

S/U CODE INDETERMINANT

1. Project Name MIDLAND		Job No. 7220		19. No. 3052	20. Page 1 of 1		
2. Unit(s) INDETERMINANT	3. Drawing/Part No. N/A	Rev N/A	4. Item Description P.O. 7220 F-45396 Item # 10 SEE 1 1/2" 300# SOCKET WELD ORIFICE FLANGE.	5. Item Location WAREHOUSE #1			
6. P.O. Or Spec No. 7220 F-45396	7. Serial No. N/A	8. Replacement Part P/N _____ REV N/A	SER NO. _____	9. Source SUPPLIER	10. Contractor/Supplier HUB INCORPORATION		
11. Inspection Criteria <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER		IR NO. R-1-00-13208 NO. 7220 F-45396	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC'G <input type="checkbox"/> CONST <input type="checkbox"/> TEST	15. Equip Furnished By <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD	
16. Nonconforming Condition: PURCHASE ORDER 7220 F-45396 REQUIRES QUALITY VERIFICATION DOCUMENTATION TO ACCOMPANY THE MATERIAL. CONTRARY TO THE ABOVE NO QUALITY VERIFICATION DOCUMENTATION HAS BEEN SUBMITTED BY THE VENDOR & FOR THE MATERIAL SUPPLIED ON AEO 13208. HOLD FOR ENGINEERING DISPOSITION. 'Q' NUMBER IS INDETERMINANT TWO (2) HOLD TAGS APPLIED TO THE NON-CONFORMING ITEM.				24. Disposition Concurrence			
				REWORK	REJECT	REPAIR	USE AS IS
				PROJECT FIELD ENGINEER	DATE		
				PROJECT ENGINEER	DATE		
				PROJECT CONSTR QC ENGINEER	DATE		
				AUTHORIZED INSPECTOR	DATE		
17. Reported By J Kanichols		Date 7/10/80		18. Validated By [Signature]		Date 7/11/80	
21. Routing		<input checked="" type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO OTHERS (SPECIFY)			
22. <input type="checkbox"/> Field Engineering Disposition		<input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING					
23. Project Engineering Disposition							
26. QC Acceptance							
				QC ENGINEER	DATE		
				AUTHORIZED INSPECTOR	DATE		



Ref. Paul Cogen

NONCONFORMANCE REPORT *Start up Code: Indeterminate*

1. Project Name Midland		Job No. 07220		19. No. 17 3053		20. Page 1 of 2	
2. Unit(s) IND.		3. Drawing/Part No. NA		4. Item Description 5/16" dia Socket Head Cap screws and Nuts		5. Item Location PS Hold Area WAREHOUSE I	
6. P.O. Order No. F-45571		7. Serial No. NA		8. Replacement Part P/N NA REV 10		9. Source Supplier	
11. Inspection Criteria <input type="checkbox"/> OWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. R-100-13187		12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
16. Nonconforming Condition:		14. Discovered During		15. Equip Furnished By		16. REC'D <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD	
<p>24. Disposition Concurrence</p> <p>2, 77 pieces of 5/16" dia. Heavy Hex nuts to be ASTM A194 grade 8C. Contrary to this, 100% of Sample 20 inspected were found to have markings of grade 8 rather than grade 8C. In addition, Purchase Order requires item number 1, 75 pieces of 5/16" dia socket head cap screws, to be ASTM A-193 grade B8C. Contrary to this Supplier has informed Bechtel expediting that the cap screws are grade B8 rather than grade B8C. Q number is indeterminate. Cont'd Page 2 of 2</p>							
17. Reported By John Hamer		Date 7/15/80		18. Validated By John Hamer		Date 7/16/80	
21. Routing		<input checked="" type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO OTHERS (SPECIFY)		25. Disposition Results	
22. <input type="checkbox"/> Field Engineering Disposition		<input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING					
23. Project Engineering Disposition							
26. OC Acceptance		QC ENGINEER		AUTHORIZED INSPECTOR		DATE	



NONCONFORMANCE REPORT (CONT'D)

20 PAGE 2 OF 2

19NCR NO 3053

! Hold tag applied. Hold Pending Final disposition.



F.I.E. CONTACT : NICK MARCO

S/U - NON TESTABLE

NONCONFORMANCE REPORT

1. PROJECT NAME MIDLAND		JOB NO. 7220		19. NO. 3054	20. PAGE 1 OF 2	
2. UNIT(S) UNIT 1	2. DRAWING/PART NO. G38-13-6	REV	4. ITEM DESCRIPTION DRILLING IN Secondary Shield Wall without permit	5. ITEM LOCATION CONT. #1		
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE CONSTRUCTION	10. CONTRACTOR/SUPPLIER N/A		
11. INSPECTION CRITERIA <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. C-1.60-281 NO. C-306 A	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Rec'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip. Furnished By <input type="checkbox"/> Client <input checked="" type="checkbox"/> Eng <input type="checkbox"/> FLD
16. NONCONFORMING CONDITION: Spec. C-306 A Sec. 2.2 states, "No grouted ANCHOR BOLTS SHALL BE INSTALLED IN THE SECONDARY SHIELD WALL UNLESS THE DRILLING IS DONE IN ACCORDANCE WITH A PROCEDURE APPROVED BY PROJECT ENGINEERING." FIELD INSTRUCTION FIG-1.111 (A) Sec. I, pg. 2, para 3 (g) STATES, IN PART, "IT SHALL BE THE RESPONSIBILITY OF THE PERMIT ORIGINATOR AND/OR THE REVIEWING DISCIPLINE ENGINEERS (CONTINUED)"			24. DISPOSITION CONCURRENCE			
			rework	reject	repair	use as is
			PROJECT FIELD ENGINEER		DATE	
			PROJECT ENGINEER		DATE	
			PROJ CONSTR QC ENGINEER		DATE	
			AUTHORIZED INSPECTOR		DATE	
17. REPORTED BY Lane May			DATE 7/15/80			
18. VALIDATED BY [Signature]			DATE 7/15/80			
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)						
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering						
23. PROJECT ENGINEERING DISPOSITION						
26. QC ACCEPTANCE						
QC ENGINEER				DATE		
AUTHORIZED INSPECTOR				DATE		



BLOCK #16 - CONTINUED -

to establish tolerances to avoid drilling into embedded pipe or conduit.

CONTRARY TO THE ABOVE, GROUTED ANCHOR BOLT HOLES FOR HANGER 638-13-6 (18-1ELB-1-H6) WERE DRILLED IN THE SECONDARY SHIELD WALL WITHOUT PROJECT APPROVAL, AND NO CONCRETE DRILLING PERMIT WAS ISSUED.

HANGER LOCATION: $9'11\frac{7}{16}''$ E/φ, $45'11''$ N/φ
el. 621' $1\frac{1}{2}''$

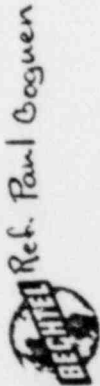
2 holes: (1) $1\frac{3}{4}''$ φ, 5" deep

(1) $1\frac{3}{4}''$ φ, $3\frac{7}{8}''$ deep (rebar encountered but not cut.)

HOLD FOR ENGINEERING DISPOSITION.

Q-451 1.105

1 HOLD TAG APPLIED.



Ref. Paul Caguen

NONCONFORMANCE REPORT

Start up code: Indeterminate.

1. Project Name Midland		Job No.		19. No. 3055		20. Page 1 of 1	
2. Units(s) INP.		3. Drawing/Part No. NA		4. Item Description 5/16" Hex Nuts		5. Item Location QC HOLD AREA WAREHOUSE I	
6. P.O. Order No. F45571		7. Serial No. NA		8. Replacement Part P/N NA REV NA SER NO. NA		9. Source Supplier	
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		10. Contractor/Supplier Talley Fasteners	
16. Nonconforming Condition: 2, 77 pieces of 5/16" dia. Heavy Hex nuts to be ASTM A-194 Grade 8C. Contrary to this, 100% of sample 20 inspected were found to have markings of Grade 8 rather than Grade 8C. Q number is indeterminate. 1 Hold tag applied. Hold Pending final disposition		14. Discovered During <input checked="" type="checkbox"/> RECIG <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input checked="" type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD		24. Disposition: Concurrence		15. Equip Furnished By	
17. Reported By John Hamer		18. Validated By Bob Summers		REWORK		REPAIR	
Date 7/10/80		Date 7/16/80		USE		AS IS	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		22. <input type="checkbox"/> Field Engineering Disposition <input checked="" type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING		PROJECT FIELD ENGINEER		DATE	
23. Project Engineering Disposition		25. Disposition Results		PROJECT ENGINEER		DATE	
				PROJECT CONSTR QC ENGINEER		DATE	
				AUTHORIZED INSPECTOR		DATE	
				26. QC Acceptance			
				QC ENGINEER		DATE	
				AUTHORIZED INSPECTOR		DATE	



Discussed with: N. Marco
C. Barton

S/U # 2ABA

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220			19. 3056 NO. XXXX	20. PAGE 1 OF 2		
2. UNIT(S) 2	3. DRAWING/PART NO. 2-632-1-4 Sub 4/F2	REV 3	4. ITEM DESCRIPTION Hanger 26"-2ELB-10-M35		5. ITEM LOCATION Cont. 2, EL 706			
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Const.	10. CONTRACTOR/SUPPLIER N/A			
11. INSPECTION CRITERIA (<input checked="" type="checkbox"/> DWG) (<input checked="" type="checkbox"/> SPEC) (<input type="checkbox"/> OTHER)		IR NO. ^{W100-2-632-4-40(14)} 407 NO. 70836 Spec NO. G-27	12. ASME AUTHORIZED INSPECTION REQ'D (<input type="checkbox"/> YES) (<input checked="" type="checkbox"/> NO)		13. SKETCH ATTACHED (<input type="checkbox"/> YES) (<input checked="" type="checkbox"/> NO)	14. Discovered During (<input type="checkbox"/> Rec'g) (<input checked="" type="checkbox"/> Const) (<input type="checkbox"/> Test)	15. Equip Furnished By (<input type="checkbox"/> Client) (<input checked="" type="checkbox"/> Eng) (<input type="checkbox"/> FLD)	
16. NONCONFORMING CONDITION:					24. DISPOSITION CONCURRENCE			
<p>Req: GWS - Structural, Rev 2 of Spec G-27, Rev 13 ¶ 5.1 and Table I requires a preheat temperature of 150°F for the thickness range of 1 1/2" - 2 1/2" when using Electrole type E7018.</p>					rework	reject	repair	use as is
					PROJECT FIELD ENGINEER		DATE	
					PROJECT ENGINEER		DATE	
					PROJ CONSTR QC ENGINEER		DATE	
					AUTHORIZED INSPECTOR		DATE	
17. REPORTED BY R. J. Wellington		DATE 7/17/80	18. VALIDATED BY [Signature]		DATE 7/17/80			
21. ROUTING: (<input checked="" type="checkbox"/> TO FIELD ENGINEERING) (<input type="checkbox"/> TO OTHERS (SPECIFY))								
22. (<input type="checkbox"/> Field Engineering Disposition) (<input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering)								
23. PROJECT ENGINEERING DISPOSITION								
26. QC ACCEPTANCE								
QC ENGINEER					DATE			
AUTHORIZED INSPECTOR					DATE			



Condi: Contrary to the Above the two "Type 45" Embeds, 2"x2'-9"x4'-8", used for Hanger 26" 2ELB-10-H35 (Sketch 2-632-1-4) were not preheated. Welding of item 1 to the two Embeds was done with the material at ambient temperature.

Q List # 4,321

1 Hold tag Applied to Hanger



Contracted Gary Coaster

NONCONFORMANCE REPORT

S/K Non-testable

1. PROJECT NAME MIDLAND		JOB NO. 7220		19. NO. 3057	20. PAGE L OF L
2. UNIT(S) 1E2	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION MASONRY MORTAR	5. ITEM LOCATION TEST LAB	
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE SUBCONTRACTOR	10. CONTRACTOR/SUPPLIER U.S. TESTING & CO. INC.	
11. INSPECTION CRITERIA () DWG (X) SPEC () OTHER	IR NO. N/A NO. 7220-A14A	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test () Eng (X) FLD	
16. NONCONFORMING CONDITION: SPEC. A-14 B STATES AT LEAST ONE TEST SAMPLE OF THE MORTAR SHALL BE TAKEN EVERY THIRD SUCCESSIVE WORKING DAY BEGINNING WITH THE FIRST DAY OF MASONRY WORK. CONTRARY TO THE ABOVE, A SAMPLE WAS NOT TAKEN ON 7-17-80 AFTER THE FIRST DAY OF MASONRY WORK WHICH WAS 7-14-80.					
17. REPORTED BY B. Delmonico	DATE 7-17-80	18. VALIDATED BY <i>[Signature]</i>	DATE	25. DISPOSITION RESULTS	
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)					
22. () Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
24. DISPOSITION CONCURRENCE					
rework		reject	repair	use as is	
PROJECT FIELD ENGINEER		PROJECT ENGINEER		DATE	
PROJ CONSTR QC ENGINEER		AUTHORIZED INSPECTOR		DATE	
26. QC ACCEPTANCE		QC ENGINEER		DATE	
AUTHORIZED INSPECT		AUTHORIZED INSPECT		DATE	



Block 16 continued.

Hold for Engineering Disposition.

One QC Hold Tag applied to EPA.

Q List #3.002



Block #16 CONTINUED -

CONTRARY TO THE ABOVE, 3 GROUTED ANCHOR BOLT HOLES, FOR HANGER ON SKETCH FSK-M-2ECB-9-1 AH2, WERE DRILLED IN THE SECONDARY SHIELD WALL WITHOUT A CONCRETE DRILLING PERMIT, WITHOUT NOTIFICATION TO Q.C., FOR INSPECTION OF DRILLING, AND A CORE HOLE DRILL WAS USED. REBAR WAS ENCOUNTERED BUT NOT CUT.

HOLD FOR ENGINEERING DISPOSITION. Q-LIST 1.105 1 HOLD TAG APPLIED.



CONTACTED: J. KELLEHER F.E.

NONCONFORMANCE REPORT

S/U Non Testable

1. PROJECT NAME MIDIAND		JOB NO. 7220		19. NO. 3060	20. PAGE 1 OF 2			
2. UNIT(S) 1/2	3. DRAWING/PART NO. N/A	REV NA	4. ITEM DESCRIPTION 3/4 Aggregate (Drummond Dom. lite)	5. ITEM LOCATION BATCH PLANT				
6. P.O. OR SPEC NO. C-208	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N NA REV NA SER NO. NA		9. SOURCE SUBCONTRACTOR	10. CONTRACTOR/SUPPLIER Allied concrete Products			
11. INSPECTION CRITERIA () DWG () SPEC () OTHER		IR NO. C-4.10-715 NO. C-208	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g () Const (X) Test	15. Equip Furnished By () Client () Eng (X) FLD		
16. NONCONFORMING CONDITION: C-208, Sec 7.3.1c states in Part "IF the test fails by more than 2% on any one sieve, two retests will be taken regardless of the moving average. IF either retest fails by more than 2% on any one sieve, the material it represents shall be rejected." Contrary to the above, 4 yds of C-1 concrete was allowed to be placed with 3/4" Aggregate not meeting Project Specifications.					24. DISPOSITION CONCURRENCE			
					rework	reject	repair	use as is
					PROJECT FIELD ENGINEER	DATE		
					PROJECT ENGINEER	DATE		
					PROJ CONSTR QC ENGINEER	DATE		
					AUTHORIZED INSPECTOR	DATE		
17. REPORTED BY R Mueford					18. VALIDATED BY [Signature]			
DATE 7-23-80					DATE 7/23/80			
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)								
22. () Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering								
23. PROJECT ENGINEERING DISPOSITION								
26. QC ACCEPTANCE								
					QC ENGINEER	DATE		
					AUTHORIZED INSPECTOR	DATE		



"Q" dist 1.405. Two hold tags were Applied at DG (635.0) F.



F.F. Jim Kelleher

NONCONFORMANCE REPORT

S/O-NON TESTABLE UNIT
Non-Testable

1. PROJECT NAME Midland		JOB NO. 7220			19. NO. 3061	20. PAGE 1 OF 3
2. UNIT(S) Common	3. DRAWING/PART NO. C-1004	REV 8	4. ITEM DESCRIPTION Expansion Anchors for Fan Supports		5. ITEM LOCATION Diesel Generator Bldg	
6. P.O. OR SPEC NO. C-305	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A	
11. INSPECTION CRITERIA <input checked="" type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. C-1-50-41 NO C-305 <input checked="" type="checkbox"/>	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Rec'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip Furnished By <input type="checkbox"/> Client <input type="checkbox"/> Eng <input checked="" type="checkbox"/> FLD
16. NONCONFORMING CONDITION: <p>① Table 4.1 of Spec C-305 calls for a minimum of 7 1/2" c/c spacing for 3/4" Anchors, unless otherwise approved by Project Eng. Contrary to this, the c/c spacing has been reduced without prior approval, as shown on attached sketch. Bays 1, 2, & 4</p> <p>② Section E on Dwg C-1004 calls for a 2 1/2" spacing from the top of the C12 to the center of the top</p>					24. DISPOSITION CONCURRENCE	
					rework	reject
					repair	use as is
					PROJECT FIELD ENGINEER	DATE
					PROJECT ENGINEER	DATE
					PROJ CONSTR QC ENGINEER	DATE
					AUTHORIZED INSPECTOR	DATE
17. REPORTED BY Stephen [Signature] DATE 7/13/80					18. VALIDATED BY S. [Signature] DATE 7/24/80	
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)						
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering						
23. PROJECT ENGINEERING DISPOSITION						
					26. QC ACCEPTANCE	
					QC ENGINEER	DATE
					AUTHORIZED INSPECTOR	DATE



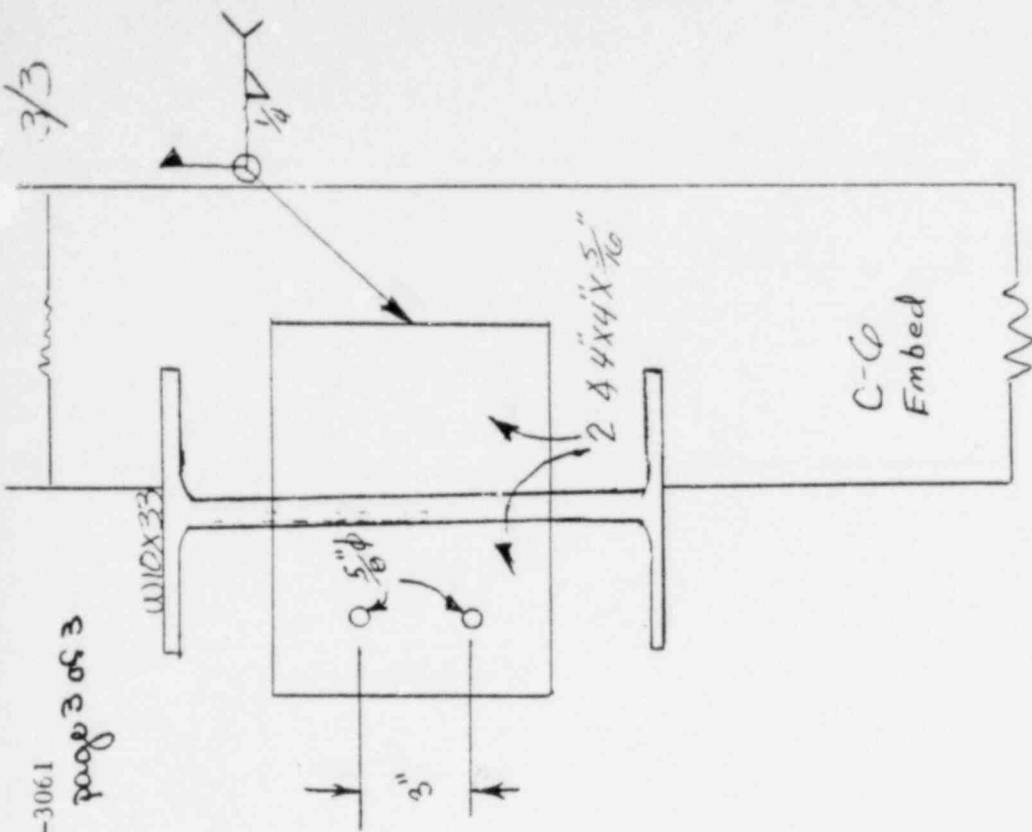
Block #16 Continued

anchor. No vertical tolerance is given. Contrary to this, the spacing has been reduced, as shown on attached sketch. Bays #2 & 4

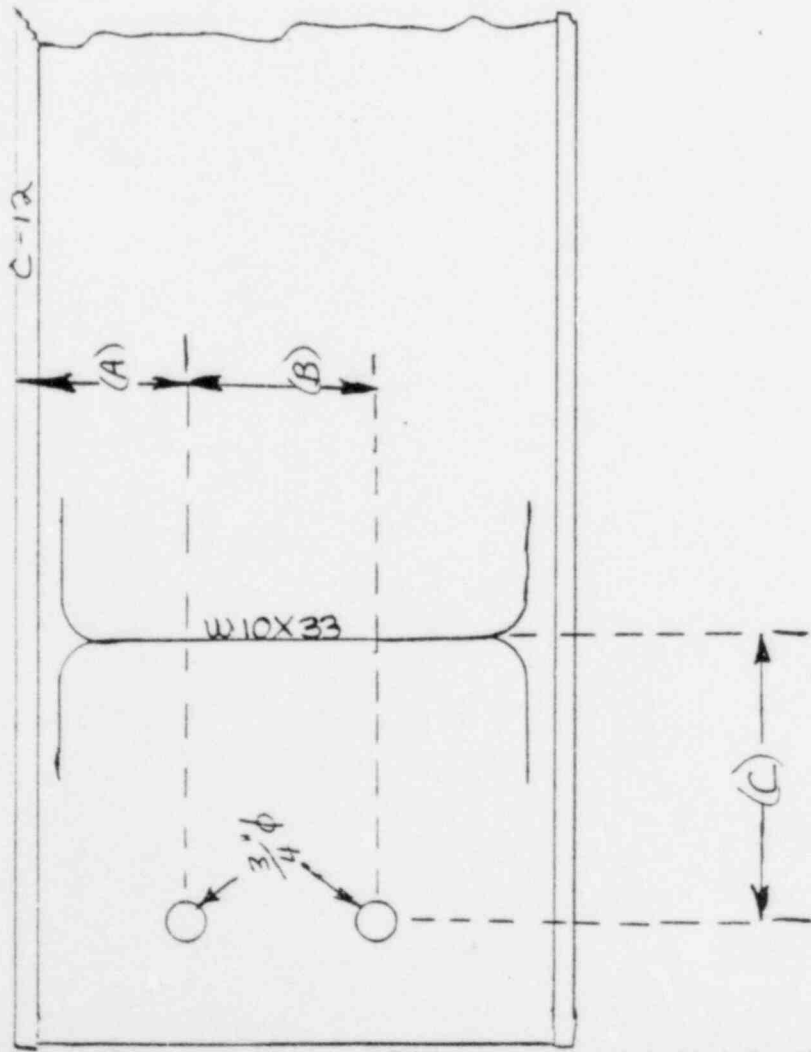
- ③ Section C and Dwg. C-1004 calls for (4) $\frac{5}{8}$ " expansion anchors, attaching clip angles to the concrete wall. Contrary to this, in one instance, an unapproved detail has been utilized to weld one clip angle to an embedded channel, as shown on attached sketch. $\frac{5}{8}$ " anchors @ 3" centers were used for the other clip angle at this location. The remaining connections, in Bay #3 per Section C, are also at 3" centers. (See disposition of NCR 2970)

Hold for Eng. Disposition Q list # 1.402
(QCAI-763)

- This is a C.P.Co. Q.A. identified discrepancy. See NCR M-01-4-9-122-



BAY #3 Looking South



Elevation View Looking South

BAY #1	BAY #2	BAY #3
(A) 2 1/2"	(A) 2 5/16"	(A) 2 13/32"
(B) 7 5/16"	(B) 7 7/8"	(B) 7 1/8"
(C) 6 1/4"	(C) 9"	(C) 9 5/8"



CONTACTED: J. KELLEHER-F.E.

NONCONFORMANCE REPORT S/U Non Testable

1. PROJECT NAME MIDLAND		JOB NO. 7220		19. NO. 3062	20. PAGE 1 OF 1
2. UNITS 18Z	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION ADMIXTURE	5. ITEM LOCATION BATCH PLANT	
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A	SER NO. N/A	9. SOURCE SUBCONTRACTOR	10. CONTRACTOR/SUPPLIER ALLIED CONCRETE PRODUCTS
11. INSPECTION CRITERIA () DWG () SPEC (X) OTHER	IR NO. C-4-10-76	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discarded During () Rec'g (X) Const () Test	15. Equip Furnished-By () ICHant () Eng (X) FLD
16. NONCONFORMING CONDITION: ASTM C 94-78a STATES THAT VOLUMETRIC MEASUREMENT SHALL BE WITHIN AN ACCURACY OF ±3% OF THE TOTAL AMOUNT REQUIRED. CONTRARY TO THE ABOVE, THE WIRDA WAS FOUND TO BE OUT OF TOLERANCE FOR ACC C-1 CONCRETE PLACED TODAY. Q LIST #1405. I HOLD TAG APPLIED.					
17. REPORTED BY B. Delmond	DATE 7-24-80	18. VALIDATED BY <i>[Signature]</i>	DATE 7/25/80	24. DISPOSITION CONCURRENTLY rework reject repair use as is	
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)		25. DISPOSITION RESULTS			
22. () Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
26. OC ACCEPTANCE				DATE	
OC ENGINEER				DATE	
AUTHORIZED INSPECTOR				DATE	



CONTACTED: J. KELLEHER-F.E.

NONCONFORMANCE REPORT

S/U Non Testable

1. PROJECT NAME MIDLAND		JOB NO. 7220		19. NO. 3063	20. PAGE 1 of 2				
2. UNIT(S) 1#2	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION CONCRETE AGGREGATE ADJUSTMENTS	5. ITEM LOCATION BATCH PLANT					
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Q.C.	10. CONTRACTOR/SUPPLIER BECHTEL				
11. INSPECTION CRITERIA () DWG () SPEC (X) OTHER		IR NO. C-410-716 NO. ASTM-C94-78a	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client () Eng (X) FLD			
16. NONCONFORMING CONDITION: ASTM C 94-78a STATES THAT THE QUANTITY OF AGGREGATE... SHALL BE WITHIN ± 2% OF THE REQUIRED WEIGHT WHEN WEIGHED IN INDIVIDUAL AGGREGATE WEIGH BATCHERS. CONTRARY TO THE ABOVE, 1.3% OF SCALE CAPACITY WAS USED FOR CUMULATIVE WEIGHTS LESS THAN 30% OF SCALE CAPACITY WHICH PLACES THE AGGREGATE OUT OF TOLERANCE. BATCH TICKET				24. DISPOSITION CONCURRENCE					
				rework	reject	repair	use as is		
				PROJECT FIELD ENGINEER		DATE			
				PROJECT ENGINEER		DATE			
				PROJ CONSTR QC ENGINEER		DATE			
				AUTHORIZED INSPECTOR		DATE			
17. REPORTED BY B. DeLeonard		DATE 7-24-80		18. VALIDATED BY [Signature]		DATE 7/24/80			
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHER (SPECIFY)						25. DISPOSITION RESULTS			
22. () Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering									
23. PROJECT ENGINEERING DISPOSITION									
						26. QC ACCEPTANCE			
						QC ENGINEER		DATE	
						AUTHORIZED INSPECTOR		DATE	



BLOCK #16 CONT. : # 39067. 2 CU. YDS. OF C-1 GROUT. "Q" LIST # 1.405. NO
HOLD TAGS APPLIED.



CONTACTED: J. KELLEHER - F.E.

[Handwritten initials]

NONCONFORMANCE REPORT

S/U Non Testable

1. Project Name MIDLAND		Job No. 7220		19. No. 3064	20. Page 1 of 3
2. Unit(s) 1E2	3. Drawing/Part No. N/A	4. Item Description INITIAL CURE OF CONCRETE SPECIMENS	5. Item Location FIELD		
6. P.O. Or Spec No. N/A	7. Serial No. N/A	8. Replacement Part P/N N/A REV N/A SER NO. N/A	9. Source ENGINEERING	10. Contractor/Supplier BECHTEL	
11. Inspection Criteria <input type="checkbox"/> DWG <input type="checkbox"/> SPEC	IR NO. SC 1.05-180	12. ASME AUTHORIZED INSPECTION RECORD <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> REC:G <input type="checkbox"/> CONST <input checked="" type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input checked="" type="checkbox"/> ENG <input type="checkbox"/> FLD	
16. Nonconforming Condition: ASTM C-31-69 STATES IN PART THAT THE INITIAL CURING TEMPERATURE OF CONCRETE SPECIMENS BE MAINTAINED AT A TEMP. OF 60 TO 80°F DURING THE FIRST 24 H AFTER MOLDING. CONTRARY TO THE ABOVE SPECIMENS CASTED ON 7-23, 24, -80 WERE MEASURED AT 110° & 91° F RESPECTIVELY. TEST RESULTS ARE ATTACHED. "Q" LIST # 1.405. NO HOLD TAGS APPLIED.					
17. Reported By B. J. Diamond		Date 7-25-80		15. Equip Furnished By TEST <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input type="checkbox"/> FLD	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING		18. Verified By [Signature]		Date 7/25/80	
22. <input type="checkbox"/> Field Engineering Disposition		25. Disposition Results			
23. Project Engineering Disposition		REWORK <input type="checkbox"/> REJECT <input type="checkbox"/> REPAIR <input type="checkbox"/> USE AS IS <input type="checkbox"/>			
		PROJECT FIELD ENGINEER DATE			
		PROJECT ENGINEER DATE			
		PROJECT CONSULTANT QC ENGINEER DATE			
		AUTHORIZED INSPECTOR DATE			
		26. QC Acceptance			
		QC ENGINEER DATE			
		AUTHORIZED INSPECTOR DATE			



BECHTEL POWER CORPORATION
MIDLAND NUCLEAR POWER PLANT JCB 07220
REPORT OF CONCRETE CYLINDERS

DATE ACCEPTANCE	DATE
CONTROL NUMBER	FILE NUMBER

IDENTIFICATION: 06(635.0)F DATE PLACED: 7-23-80

PLACEMENT LOCATION: O/S Bldg.

PLANT DATA: Allied Concrete Products CEMENT BRAND AND TYPE: Astma Type I

CLASS: I REQUIRED STRENGTH: 4000 PSI AT 90 DAYS

TEST DATA AT BATCH PLANT: Yield: 27.65

CONCRETE NO.: 39048 TIME OF HOLDING: 1114 HOURS AT 6 YARDS INITIALS: RB

WATER-CEMENT RATIO: 0.5 UNIT WEIGHT: 14418 TEMP. CONCRETE: 74 TEMP. AIR: 70

WATER-CEMENT RATIO: 0.5 MAX. 45 ACT.

INITIALS: N/A

TEST DATA AT PLACEMENT

CONCRETE NO.: 39048 TIME OF HOLDING: 1205 HOURS AT 6 YARDS INITIALS: GW

WATER-CEMENT RATIO: 4.6% TEMP. CONCRETE: 78 TEMP. AIR: 75

INITIALS: SPT

COMPRESSIVE STRENGTH DATA ASTM - C - 39 - 71

27. SPECIMEN IDENTIFICATION	28. DATE MOULDED	29. DATE TESTED	30. AGE	31. TOTAL LOAD IN POUNDS	32. ACTUAL CYL. DIAM.	33. ACTUAL CYL. AREA	34. CURE		35. STRENGTH PSI
							36. MINS	37. HRS	
4652E-8979	7-23-80	7-30-80	7						
8980		"	7						
8981		8-20-80	28						
8982		"	28						
8983		10-21-80	90						
4652F-8984	7-23-80	"	90						

STANDARD CYLINDER: 8" x 12" CUBE CORE OTHER

LABORATORY SUPERVISOR: _____ DATE: _____

* TYPE OF BREAKS: A = CONE, MORTAR FAILURE; B = CONE, AGGREGATE FAILURE; C = SHEAR, MORTAR FAILURE; D = SHEAR, AGGREGATE FAILURE; E = OTHER

NCR 3064
PAGE 2 OF 3



BECHTEL POWER CORPORATION
MIDLAND NUCLEAR POWER PLANT JOB 07220
REPORT OF CONCRETE CYLINDERS

DATE OF ACCEPTANCE	DATE
CONTROL NUMBER	FILE NUMBER

1. CEMENT IDENTIFICATION DG (633.08) A & SW (618.75) A DATE PLACED 7-24-80

2. PLACEMENT LOCATION DIE SEL CON. BAY #2, SERV. WATER METER PITS

PLANT DATA SOURCE Allied Concrete Products CEMENT BRAND AND TYPE Aetna Type I

3. MIX CLASS C-1 CLASS I REQUIRED STRENGTH 4000 PSI AT 90 DAYS
 YES NO

TEST DATA AT BATCH PLANT Yield: 27.74

4. TICKET NO. N/A TRUCK NO. N/A TIME OF HOLDING N/A HOURS AT N/A YARDS INITIALS N/A

5. SLAG N/A AIR CONTENT N/A UNIT WEIGHT N/A TEMP. CONCRETE N/A TEMP. AIR N/A

6. MOISTURE N/A WATER/CEMENT - POZZOLAN RATIO N/A MAX. N/A ACT.

7. INITIAL CURING N/A STRIPPED N/A AT N/A HRS. INITIALS N/A

TEST DATA AT PLACEMENT

8. TICKET NO. 39071 TRUCK NO. 18 TIME OF TESTING 1240 HOURS AT 7-24-80 36 YARDS TIME OF HOLDING _____ HRS.

9. SLAG 2" AIR CONTENT 4.0% TEMP. CONCRETE 80° TEMP. AIR 71° INITIALS TAB

10. INITIAL CURING 90 STRIPPED 91 AT _____ HRS. INITIALS _____

COMPRESSIVE STRENGTH DATA ASTM - C - 39 - 71

17. SPECIMEN IDENTIFICATION	18. DATE MOULDED	19. DATE TESTED	20. AGE	21. TOTAL LOAD IN POUNDS	22. ACTUAL CYL. DIAM.	23. ACTUAL CYL. AREA	24. CURE		25. STRENGTH PSI
							WATER	WIND	
4654F-8991	7-24-80	7-31-80	7						
8992		7-31-80	7						
8993		8-21-80	28						
8994		8-21-80	28						
√ 8995	√	10-22-80	90						
4654F-8996	7-24-80	10-22-80	90						

11. STANDARD CYLINDER 12" X 12" CUBE CORE OTHER _____

12. CHECKED BY _____ DATE _____

LABORATORY SUPERVISOR _____ DATE _____

* TYPE OF BREAKS A = CONE, MORTAR FAILURE B = CONE, AGGREGATE FAILURE C = SHEAR, MORTAR FAILURE
D = SHEAR, AGGREGATE FAILURE E = OTHER

NCR-3064
PAGE 3 OF 3



F.E. G. Coaster

NONCONFORMANCE REPORT

Non-Testable Unit

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 3066	20. PAGE 1 OF 1
2. UNIT(S) Common	3. DRAWING/PART NO. Dwg A-52 sht 2/1	REV 9	4. ITEM DESCRIPTION Block Wall #12	5. ITEM LOCATION Aux. E.L.G.4	
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N A/A	9. SOURCE Contractor	10. CONTRACTOR/SUPPLIER N/A	
11. INSPECTION CRITERIA <input checked="" type="checkbox"/> DWG <input type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. C-1-80-47	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Disccovered During <input type="checkbox"/> Rec'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test	
15. Equip Furnished By <input type="checkbox"/> Client <input type="checkbox"/> Eng (MFLD)					
16. NONCONFORMING CONDITION: Detail #8 Wall Reinforcing Schedule of on Dwg A 52 shows that the maximum wall height of an 8" thick block wall, with top connection, is 16'-6". Contrary to this, Block Wall #8 & 12 has been constructed and is approx. 18' high. Top connections have been provided per details 6 and 7. Hold for Eng. disposition. No hold tags applied. CP Inst # 1.205					
17. REPAIRED BY S. G. Bell		DATE 7/28/80	18. VALIDATED BY S. G. Bell	DATE 7/28/80	
21. ROUTING: <input type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)					
22. <input type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering					
23. PROJECT ENGINEERING DISPOSITION					
24. DISPOSITION CONCURRENCE					
rework		reject	repair	use as is	
PROJECT FIELD ENGINEER		PROJECT ENGINEER		DATE	
PROJ CONSTR QC ENGINEER		AUTHORIZED INSPECTOR		DATE	
25. DISPOSITION RESULTS					
26. QC ACCEPTANCE					
QC ENGINEER				DATE	
AUTHORIZED INSPECTOR				DATE	



DISCUSSED WITH - K. BISHOP
NONCONFORMANCE REPORT

START-UP # 186A

1. PROJECT NAME MIDLAND 7220		JOB NO.	
2. UNIT ONE	7. DRAWING/PART NO. 7-603-SH #13	4. ITEM DESCRIPTION FW #2 ON SPOOL # 1 HCC-46-603-13-1 AUX BLDG. 6.2 EIB	REV 6/F1
6. P.O. OR N/A	8. REPLACEMENT PART P/N REV SER NO.	9. SOURCE CONSTRUCTION	10. CONTRACTOR/SUPPLIER N/A
11. INSPECT. CRITERIA () DWG () SPEC () OTHER	12. DATE AUTHORIZED IR NO. HSMC SEC III N/A-4/11	13. SKETCH ATTACHED () YES () NO	14. DISCOVERED DURING () Rec () Const () Test
15. Equip Furnished By () Client () Eng () FLD			
16. NONCONFORMING CONDITION: REQUIREMENT: HSMC SECT III NB-4/11			
STATES IN PART: THE MANUFACTURER AND/OR INSTALLER IS RESPONSIBLE FOR CONTROL OF THE WELDING ELECTRODES AND OTHER MATERIALS WHICH ARE USED IN THE FABRICATION AND INSTALLATION OF COMPONENTS. CONDITION: FW #2 COMPLETED WITH NO Q.H. RECORDS (ie WR-5, WR-6, OR W100) TO CONTROL & IDENTIFY FILLER MATERIAL			
17. REPORTED BY JOSEPH CABRAL 7/25/80	18. VALIDATED BY [Signature]	DATE 7/29/80	21. ROUTING: X TO FIELD ENGINEERING () TO OTHERS (SPECIFY)
22. () Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering			
23. PROJECT ENGINEERING DISPOSITION			
24. DISPOSITION CONCURRENCE			
rswork	object	repair	use as is
PROJECT FIELD ENGINEER	DATE	PROJECT ENGINEER	DATE
PROJ CONSTR QC ENGINEER	DATE	AUTHORIZED INSPECTOR	DATE
28. DISPOSITION RESULTS			
28. QC ACCEPTANCE		QC ENGINEER	DATE
AUTHORIZED INSPECTOR		DATE	

19. NO. 3067
20. PAGE 1 OF 2



START-UP # 18GA

NONCONFORMANCE REPORT (CONT'D)

20 PAGE 2 OF 2

19 NCR NO 3067

BLOCK #16 CONTINUED:

OR WELD PROCESS, AND INSPECTION OF THE WELD, LEAVING
THE INTEGRITY OF THIS WELD JOINT UNDETERMINED.
(ONE HOLD TAG APPLIED) (PLIST #4.037) JOSEPH CABRAL 7/25/80

CLOSED NCR'S



Alab

Corrected Copy

18 2-15-80
12-26-79
3-20-80

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1118	20. PAGE 1 OF 2
2. UNIT(S) Common & Unit I & II		3. DRAWING/PART NO. See Block 16		4. ITEM DESCRIPTION Vertical Axial Fans	
6. P.O. OR PRG. NO. 7220-M-157AC Rev. 2		7. SERIAL NO. See Block 16		8. REPLACEMENT PART P/N N/A REV. SER NO.	
11. INSPECTION CRITERIA () DWG (X) SPEC () OTHER		R-1 00-2246, 2297, 2315 NOM-157 Rev. 3		12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	
13. SKETCH ATTACHED () YES (X) NO		14. Discovered During (X) Rec'g () Const () Test		15. Equip Furnished By () Client (X) Eng () FLD	
17. REPORTED BY <i>John R. Albers</i>		DATE 12-15-77		18. VALIDATED BY <i>AM J. V. Foster</i>	
17. DATE		DATE		25. DISPOSITION RESULTS	
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)		22. () Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering		Job 7220-QA-Received 8/2/80	
PROJECT ENGINEERING TO RESOLVE THIS NCR.		San Hendricks 12-20-77		Item Name Replacement	
W. W. W. head 20 Dec 77		D. Duckering 12-20-77		nameplate received	
Dale Short 1-9-79				reviewed & installed.	
23. PROJECT ENGINEERING DISPOSITION		"REJECT" - Vendor to provide corrected nameplates that are consistent with Bechtel Level 1 approved vendor drawings.		Route Info Act Comment	
				P.O.A.E.	
				P.C. agrees with	
				Project Engineering	
				all items now	
				acceptable.	
				S.T. V. [Signature]	
				Inst. 2/11/80	
				Trn Ovr	
				Trend	
				Sect.	
				26. QC ACCEPTANCE	
				QC ENGINEER DATE 7/11/80	
				AUTHORIZED INSPECTOR DATE	

RIGHT

Continued Block 16

NONCONFORMANCE RECORD CONTROL

10 V - 13104775 6-11-10
6-13104775 6-11-10
3-10-76
14. NCR NO .118

1. Drawing 7220-M-157-31-3 indicates the CFM to be 180CFM where as the nameplates for fan 1VW68A says 175CFM.

2. Documentation Package for fan 2VW68A states that the fan motor is 1YF882408A1 while the nameplate is 1YF882408A2.

3. Drawing 7220-M-157-18-3 indicates the CFM to be 175CFM while the nameplate for fan 1VW68B is stamped 180CFM; no static pressure rating was stamped on the nameplate.

4. Data Sheet 7220-E-10 Rev. 0 for OVV3A & B fans states the RPM (full load) as 3450 rpm and the amps (full load) as 26.0 amp where as the documentation package and the nameplates states 3540 rpm and 25.0 amps.

5. Data Sheets 7220-E-10 Rev. 0 for 1VW85A-D and 2VW85A-D states the full load amps as 36.0 amps while the documentation and nameplate says 38.2 amps.

"Q" numbers are 4.657, 4.654, 4.681. Hold pending final disposition.

13 Hold tag(s) applied to the nonconforming items.

10088-2

White Copy - Originator
Canary Copy - Field Engineer
Pink Copy - PQAE
Goldenrod Copy - QC

QC-63-3

Continued from block 16

Subsequent inspection of the subject nonconforming items has revealed the following additional information:

1. The specification requirement for fan 1VV68A is 175 CFM at .875" W.G. (See Attachment 1). This is also what is indicated on the nameplate. The actual output, however, is 180 CFM at .875" W.G. This is indicated on the Joy invoice, on the Test Certification Summary, and on drawing 7220/M157-31-3.
2. No additional information.
3. The specification requirement for fan 1VV68B is 180 CFM at .875" W.G. (See Attachment 1). This is also what is indicated on the nameplate and the Test Certification Summary. The Joy invoice and drawing 7220/M157-18-3, however, indicate an output of 175 CFM.
4. The Data Sheet indicates the speed of fans OVV-3A & OVV-3B as 3450 RPM. The Reliance Report of Routine Tests indicates 3540 RPM. The Joy Test Certification Summary indicates 3450 RPM. The nameplate attached by Reliance indicates 3540 RPM and the nameplate attached by Joy indicates 3500 RPM. The actual speed of the fans is indeterminate from the documentation and nameplates (See Attachments 2 & 3).
5. No additional information.

WJ
W. Bareley
3-20-78

Attachment 1
 Corrected Form

FORM 4 11/18
 NOV 1978
 ITEM NO. 3
 NO REQ'D 4

PLANT Midland LOCATION Any ELEVATION 673'-6"
 BUILDING Any REG. NO. P.O. 7220-M-157
 LOCATION INDOOR OUTDOOR RADIOACTIVE AREA YES NO COST CODE 5.201
 INDOOR TEMP WINTER 75° °F SUMMER 62.6 °F DB/WR NLET AIR/GAS TEMP. °F DB/WR
 AIR GAS TYPE OF GAS N/A AIR/GAS DENSITY 0.74 LBS./CUFT.

RATING		MINIMUM	MAXIMUM	SPECIFIC SPEED RANGE AT RATED
FAN CAPACITY	ACFM			ACFM & STATIC/TOTAL EFFICIENCY
	SCFM			
EXT. STATIC PRESSURE (IN. W.G.)	ACFM			MAX. WHEEL DIAM. IN.
	SCFM			
VELOCITY PRESSURE (IN. W.G.)	ACFM			EQUIVALENT DUCT DIAMETER
	SCFM			
TOTAL PRESSURE (IN. W.G.)	ACFM			INLET IN.
	SCFM			
FAN BHP (DRAW)	ACFM			OUTLET IN.
	SCFM			
STATIC EFFICIENCY, % (MIN.)				AMCA FAN TYPE
TOTAL EFFICIENCY, % (MIN.)				<input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C
DRIVE ARRANGEMENT #4				SERVICE CONDITION: Continuous
MOTOR POSITION N/A				40yrs. integrated rad doses
FIXED BLADES <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				4.57 x 10 ³ rads

DRIVE ARRANGEMENT #4 AMCA INLET VANE CONTROL YES NO MANUAL AUTO
 MOTOR POSITION N/A AMCA VARIABLE PITCH OR INLET VANE ACTUATOR (AUTO-TYPE)
 FIXED BLADES YES NO PNEUMATIC TYPE YES NO
 VARIABLE PITCH BLADES (Adjust) YES NO ELECTRIC TYPE YES NO N/A
 INTERNAL MANUAL TYPE (Man.) YES NO COMPRESSED AIR _____ PSIG (LINE)
 EXTERNAL MANUAL TYPE YES NO CONTROL CIRCUIT _____ VOLTS _____ PH. _____ HZ.
 AUTOMATIC ADJUSTABLE TYPE YES NO DISCHARGE POSITION UP DOWN HORIZONTAL

MATERIALS				VIBRATION ISOLATION			
HOUSING	STEEL	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	STAINLESS STEEL	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
WHEELS	STEEL	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	ALUMINUM	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> RUBBER <input checked="" type="checkbox"/> SPRING <input type="checkbox"/> NEOPRENE		
HUB	STEEL	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	ALUMINUM	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	FURN. BY	<input type="checkbox"/> BUYER <input checked="" type="checkbox"/> SELLER	
SHAFT	STEEL	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	STAINLESS STL.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	STATIC DEFL.	_____	
MOTOR BRACKET	STEEL	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	OTHER _____		INDIV. MNTS	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
MOUNTING SUPPORTS	STEEL	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	OTHER _____		INDIV. HNGRS	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	
GUIDE VANES	STEEL	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	OTHER _____		INDIV. RAIL	_____	
SCREEN	GALVAN. STL.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	STAINLESS STL.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	WITH MOUNTS	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
BEARINGS	ANTI FRIC.	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	SLEEVE BEARING	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO N/A	STR'L STL' BASE WITH REBAR AND MOUNTS	<input type="checkbox"/> YES <input type="checkbox"/> NO	
INLET VANES	STEEL	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	CAST IRON	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO			

SCREEN INLET: YES NO OUTLET: YES NO FREE AREA RATIO _____
 INLET BELL YES NO VARIABLE PITCH OR INLET VANE ACTUATOR:
 INLET CONE YES NO FURNISHED BY SELLER BUYER OTHER N/A
 OUTLET CONE YES NO FACTORY INSTALLED YES NO
 INLET VANE YES NO FIELD INSTALLED BY: _____
 MOUNTING BRACKETS YES NO Ceiling Mounted

DRIVER TYPE: MOTOR/OTHER Explosion Proof M. POWER SUPPLY 480 V 3 PH 60 HZ.
 FURN. BY Seller MFR. _____
 BEARING DESCRIPTION _____ THRUST RATING _____
 DRAWING NO. N/A DIMENSION LARGEST PIECE _____ PERF. CURVE YES NO
 QUALITY CONTROL REQ'D PER YES NO MFG. STD. YES NO "O" LISTED YES NO
 EXAMINATION ULTRASONIC - EDDY CURR. - MAG. PART CR LIQ. PEN. RADIOGR. -
 TESTING PERFORMANCE Yes WITNESSED Yes FIELD No
 SEISMIC CATEGORY I UBC NONE

REMARKS *Above sea level

Δ	1-14-77	REVISED DATA SHEET.	RG	SP	TH	MS
Δ	3-24-76	Issued for Purchase Order	QR	SP	TH	MS
Δ	2-25-76	Issued for Quotation	GR	SP	TH	MS

DATE _____ REVISIONS _____

ORIGIN _____ VANE AXIAL FAN _____ CHIEF ENGR _____

Battery Room Exh. Fans
 Consumers Power Company
 Midland Plant Units 1 & 2

JOB NO. 7220
 DATA SHEET NUMBER Attachment 10 REV. 3
 3 of 5

This drawing and the design it covers are the property of BECHTEL. They are merely loaned on the borrower's express agreement that they will not be reproduced, copied, exhibited, or used except in the limited way and private use permitted by any written consent given by the lender to the borrower.

AL NUMBER

Corrected Attachment 2

Page 5 of 8
NCR 1118-T/B
93-138

RELIANCE ELECTRIC COMPANY

24701 Euclid Avenue, Cleveland, Ohio 44117

E437K

REPORT OF ROUTINE TESTS

Induction Motor

Purchaser

Joy Manufacturing Company
338 South Broadway
New Philadelphia, Ohio 44603

Date of Test 5/11/77

Manufacturer's Order No. 3YF 882408

Purchaser's Order No. NA2498

OVV-3A #B

NAMEPLATE DATA

Hp	Service Factor	Rpm	Phase	Hertz	Volts	Ampere
20	1.00		3	60	460	

Type	Frame	Temperature Class	Ambient Temp and Insulation Class	Time Rating	Design Letter	Code Letter for Locked Kva/Hp
P	256TCZ	Type RH	50/H	Cont.	A	J

TEST CHARACTERISTICS

Serial Number	No Load				Locked Rotor (Synchronous Three Phase)			Wound Rotor Open Circuit Volt.	High potential Test Voltage
	Volts	Hertz	Rpm	Ampere	Volts	Hertz	Ampere		
A 1	460	60	3600	9.80	460	60	176		*
A 2	460	60	3600	10.0	460	60	184		*

Notes: * 2000 Volts, 60 seconds

Data on test from these motor.
(this or duplicate)

Approved by R.L. Miller (Engineer) Date 5/12/77

BECHTEL
281

AL 170342 254F001 7A

Corrected Copy

MANUFACTURING COMPANY
PHILADELPHIA, OHIO 44663

DATE August 11, 1977

PAGE 1 OF 3

REPORT NO. X-646

TEST CERTIFICATION SUMMARY

PURCHASER Bechtel Power Corporation

MFGRS. ORDER NO. NPX-67486

P.O. Box 1000

PURCHASE ORDER NO. 7220-M-157AC

Ann Arbor, Michigan 48106

DESCRIPTION OF FAN:

TYPE AXIAL UNIT 500772-542 MODEL 18-14-3500 (TWO STAGE)

CFM 4,000 PRESSURE 10.3" TP DENSITY 0.075 #/CU. FT.

SERIAL NO. SF-37718 and SF-37719 (OVV-3A & 3B)

DESCRIPTION OF MOTOR:

MFR. RELIANCE JOY PART NO. 600288-331 FRAME 256T

SERIAL NO. 3YF882408 HP 20 RPM [REDACTED] VOLTAGE 460

AMP [REDACTED] PHASE 3 CYCLE 60 RISE _____

ENCLOSURE TEAO SERVICE FACTOR _____

INSULATION RII AMBIENT _____

TIME AND PLACE OF TESTING:

Wednesday, August 10, 1977

Joy Manufacturing Company Test Laboratory, New Philadelphia, Ohio

WITNESSES:

Mr. C.R. Ophlenschlager, Bechtel Corporation



1895
7 + 76-13-00

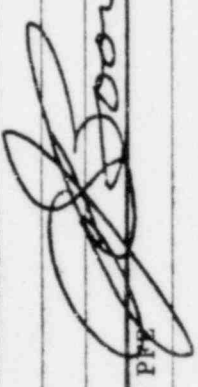
NONCONFORMANCE REPORT (CONT'D)

14. NCR NO 1118

1 PAGE OF 8

Continued from Block 16

A conditional release is granted to install vertical axial fans #OVV-3A, OVV-3B, OVV-66A and OVV-66B. These fans are recoverable at any time during construction. New name plates will be replaced when received on site from vendor.



 Date 6-29-78 PFQCE Phil W. Burelay Date 6/29/78

IQAE R.C. Holler for Date 6/29/78

G.L. Richardson

QC-013

White Copy - Originator
 Canary Copy - Field Engineer
 Pink Copy - PQAE
 Goldenrod Copy - QC

100000-2

18 93
6-15-80

Block 23 continued

The following is an item-by-item disposition.

1. Vendor Print 7220-M157-31 has been revised and resubmitted to reflect the specified flowrate of 175 cfm for fan 1VV-68A. The 180 cfm at 0.875" wg on the Test Certification Summary is acceptable because this indicates slight conservatism in the fan capability.

A replacement nameplate with the specified flowrate of 175 cfm has been forwarded to the field (i.e., Joy letter, F. Pietro to B. Reigelsperger, May 12, 1980).

2. The documentation package for fan 2VV-68A has been revised to reflect the correct serial number (i.e., Joy letter, F. Pietro to R.L. Stubbs, February 22, 1980). The correct serial number is 1YF882408A2.

3. Vendor Prints 7220-M157-31 and 7220-M157-32 have been revised and resubmitted to reflect the specified flowrate of 180 cfm. Nameplates with the static pressure rating indicated have been sent to the field.

4. Vendor Print 7220-M157-1 has been revised and resubmitted to reflect the correct full load rpm of 3,540 and full load current of 25 amps (Joy letter, F. Pietro to B. Reigelsperger, April 24, 1980).

5. The data sheet for 1VV-85A through D and 2VV-85A through D has been revised and resubmitted to reflect the correct full load current of 38.2 amps.

*Done
6/15/80*

*EM Hughes
for Lt Colons 6-6-80*

Pg. 9 of 1218 ^{2/3}
NCR 1118 ⁶⁻¹³⁻⁸⁰



February 22, 1980

JOY INDUSTRIAL EQUIPMENT COMPANY

NEW PHILADELPHIA DIVISION
338 SOUTH BROADWAY
P. O. BOX 431
NEW PHILADELPHIA, OHIO 44663

Bechtel Power Corporation
P.O. Box 2267
Midland, Michigan 48640

Attention: Mr. R.C. Stubbs
Project Procurement Manager

Subject : Bechtel P.O. 7220M-157-AC
Bechtel NCR #118
JOY NPX-67486

Gentlemen:

We have reviewed your report NCR #118 and in telephone discussions, regarding this report, with Mr. Bruce Reigelsperger, it was determined that items 2 and 4 remain to be resolved. We propose the following resolutions:

Item 2: Documentation package for fan 2VV68A states that the fan motor is #1YF882408A1, while the nameplate is #1YF882408A2.

Response: Please be advised the 1YF882408 number is the motor manufacture identification number. The last two digits represent quantity lot serial number only. Enclosed is a revised Fan check sheet showing this correction. Also for your information is enclosed a copy of Reliance Electric telex stating motor unit A1 as re-furbished carries a tag number of R42825. Hence this is academic and there is no adverse effect on the fan unit.

Item 4: Data Sheet 7220-E-10 Revision 0 for 0VV3A & B states the RPM (full load) as 3450 and the Amps (full load) as 26.0 amp. where as the documentation package and the nameplates states 3450 RPM and 25.0 amps.

Response: The motor data sheet as first submitted, is calculated data, hence the slight variation. Enclosed is a revised motor data sheet covering the motor on equipment #0VV3A & B, to be in agreement with the nameplate.

Continued . . .

NCR 1118 pg. 9 of 1218 6-13-80

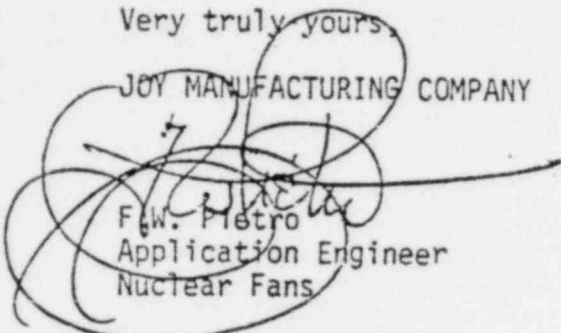
Pg 10 of 77 18 4/2
6-13-80
NCR 1118

Bechtel Power Corporation
Page 2
February 22, 1980

We trust this satisfactorily answers your NCR #118. However, should you have any questions please contact us.

Very truly yours,

JOY MANUFACTURING COMPANY



F.W. Pietro
Application Engineer
Nuclear Fans

FWP: rh

cc: CF/NPX-67486

Attachments.

NCR 1118 pg. 10 of 18 2-13-80

pg. 11 of 12 78 98
6-13-80
NCR 1118

WU INFOMASTER
ICS RELAYH AST 4-018665m137 L 719710
ZCZC 1
TLX 983413 JUY NPFI



ATTN: BILL BEANS - JUY
CC: D. V. MARSHALL - KCL
CC: J. VASCHAK - KRU
CC: M. KODICK - RCS

BT
YOUR P/N / 600288-329, P.O. NA-2498, OUR IYF 822418

ALL OF TOTAL OF 4 UNITS NOW BEARING NAMEPLATE IDENTIFICATION
K-42625 WAS REPAIRED PER YOUR P.O. NA-6312 AND IS HEREBY
CERTIFIED TO MEET ALL THE REQUIREMENTS OF THE ORIGINAL ORDER
AS OUTLINED IN YOUR P/N 600288-329 AND OUR IYF 822418.

LUD MILLER KAH LC

NNNN
/ REPLACES CHAR(S) ON SENDERS KEYED UNAVAIL OF YOURS

1227 EST
JUY NPFI

2VV-68B

NCR 1118 p-11 of 18
6-13-80

DATE	
APPROVALS	
MATL	
CUPV	
CHK	
DR	
EMO	
REV. DESCRIPTION	

ALL MOTORS	0VV3B Item 1
SERVICE	Axial Fan
MANUFACTURER	Reliance
TYPE	Induction
FRAME DESIGNATION	*2561CZ
HORSEPOWER OUTPUT	20
TIME RATING/TEMP. RISE °C	Cont/50
RPM AT FULL LOAD	** 3540
VOLTAGE	460
FULL LOAD AMPS	*25.0
*ENCLOSURE	TEAO
VERTICAL OR HORIZONTAL	Either
BEARINGS (SLEEVE OR BALL)	Ball
TYPE OF LUBRICATION	Grease
INSULATION CLASS	RH
ROTATION (VIEWED FROM END OPP. SHY)	Either
FULL LOAD TORQUE	29.7
STARTING TORQUE-% OF FULL LOAD	24.8
EFFICIENCY - 100% LOAD	89.9
- 75% LOAD	91.0
- 50% LOAD	90.6
SERVICE FACTOR	1.0
IS THERMAL PROTECTION PROVIDED	No
WEIGHT	232
PHASE	3
FREQUENCY	60
LOCKED ROTOR CURRENT	*184.0
POWERFACTOR - 100% LOAD	81.8
- 75% LOAD	76.0
- 50% LOAD	66.5
NEMA DESIGN LETTER	A
SECONDARY AMPS @ FULL LOAD	N/A
SECONDARY VOLTAGE	N/A
SECONDARY OHMS	N/A
BREAKDOWN OR PULLOUT TORQUE-%	334
RATED FIELD CURRENT	N/A
RATED EXCITER VOLTAGE	N/A
RATED POWER FACTOR	89.9
PULL IN TORQUE - % OF FULL LOAD	234
TYPE OF WINDING	Random
SHUNT FIELD CURRENT	N/A
ALLOWABLE WK ² OF LOAD	62.4
SPACE HEATERS - WATTS/VOLTS	N/A
TWO SPEED MOTORS-NO OF WINDINGS	N/A
TORQUE	N/A
THRUST BEARING CAPACITY-UP (LBS)	N/A
CAPACITY-DOWN (LBS)	N/A

ENCLOSURE: DRIPPROOF (DP), SPLASHPROOF (SP), WEATHER PROTECTED (WP), TOTALLY UNCL
 ON-VENTILATED (TENY), TOTALLY ENCLOSED FAN COOLED (TEFC), TOTALLY ENCLOSED PIPE
 ATED (TEPV) ETC. EXPLOSIONPROOF XP, TO INDICATE GUARDED ADD "G".



POWER DIVISION
 ENGINEERING

ELECTRIC MOTOR DATA SHEET
 MIDLAND PLANT
 CONSUMERS POWER COMPANY

JOB No 7220
 SPECIFICATION
 7220-E-10

NCR 1118 09/29/78

09/15/80

MODEL 18-14-1770		UNIT OR ABM No. 525181-65		JOY ORDER NO. MPX 167486 ✓	
SERIES 1000	SERIAL NO. SF37725	DUTY RATING 180 CFM @ 87.5 FT. 87.5 PS		SPEED 1770	BLADE SETTING 17
MOTOR PART NO. 600288-329		MOTOR MAKE RELIANCE	NOM. AMPS 1.7	F.L. AMPS	MAX. A.O. H.P. 1

SEPARATE SHEET FOR EACH INSPECTION LOT 3-60-460

INSPECTED TO FF 15314

FOOTERS Loc <input type="checkbox"/> OK	FOOTERS CLIPS <input type="checkbox"/>	HOLE CENTERS <input type="checkbox"/> OK	FLANGE HOLE CENTERS <input type="checkbox"/> OK
CLIPS FF <input type="checkbox"/> 15314	CASING LENGTH <input type="checkbox"/> ²⁰ OK	DIAM. & ROUNDNESS <input type="checkbox"/> OK	WELDED PER IL-818 <input type="checkbox"/> OK
CONDUIT BOX LOCATION <input type="checkbox"/> OK	CONDUIT TACKED IF SPECIFIED <input type="checkbox"/> OK	CONDUIT BOX HOLES PLUGGED <input type="checkbox"/> OK	
BLADE ROOT/HUB CLEARANCE <input type="checkbox"/> OK	RIM/INNER FAIRING CLEARANCE <input type="checkbox"/> OK	BLADE TIP CLEARANCE <input type="checkbox"/> OK	
BLADE SETTING PER S.O. <input type="checkbox"/> OK	BLADES TIGHT <input type="checkbox"/> OK	NOSE COVER FIT <input type="checkbox"/> OK	
LOCKNUT CLINCHED <input type="checkbox"/> OK	FAN TAGGED FOR LAB TEST IF REQUIRED <input type="checkbox"/> OK	DRAIN PLUGS IN MOTOR <input type="checkbox"/> OK	
GREASE FITTINGS CAPPED <input type="checkbox"/> OK	WELDING INSPECTED PER QCP-20 ADDENDUM 1 <input type="checkbox"/> OK	MOTOR GREASE RELIEF FULL OF GREASE <input type="checkbox"/> OK	
SURFACE CONDITION <input type="checkbox"/> OK	DATA ON BACK COMPL. <input type="checkbox"/> OK	INSPECTION COPY OF S.O. TIES WITH MFG. COPY <input type="checkbox"/> OK	
MASKING CHECKED <input type="checkbox"/> OK	CORRECT FLANGE/CASING THICKNESS <input type="checkbox"/> OK	EACH DIMENSION ON FF DWG. IN TOLERANCE <input type="checkbox"/> OK	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

PREPAINT INSPECTOR <i>[Signature]</i>	DATE 8-9-77
---------------------------------------	-------------

MECH. INSPECTOR <i>[Signature]</i>	DATE 8-9-77
------------------------------------	-------------

PAIN CODE PER FF-13254 <input type="checkbox"/> R OK	PAINT THICKNESS CHECKED <input type="checkbox"/> OK	PAINT JOB QUALITY <input type="checkbox"/> OK
ALL NAMEPLATES & STENCILS CHECKED <input type="checkbox"/> OK	BLADE TIP CLEARANCE RECHECKED <input type="checkbox"/> OK	MASKING REMOVED <input type="checkbox"/> OK
ALL ACCESSORIES ON ON S.O. INSPECTED <input type="checkbox"/> 14	SAFETY WIRING <input type="checkbox"/> OK	COND. BOX HOLES, PLUGGED <input type="checkbox"/> OK
LOCALS, PLATES, STENCIL TIE WITH S.O. & FF DWG <input type="checkbox"/> OK	<input type="checkbox"/>	<input type="checkbox"/>

RECEIVED 281

FINAL INSPECTOR <i>[Signature]</i>	DATE 8-15-77
------------------------------------	--------------

Pg. 14 of 79 10 23
6-13-80
NCR 1118

FAN SERIAL SF37723	CUST. EQPT. NO. 2VV-68A	WHIRL DAT. 6-16-77	BLADE SERIAL NUMBERS			
MOTOR SERIAL 1VF882108A1	A2	HUB HEAT NO. NA	NA			
MAX. UNBALANCE .0006	BALANCER 106	BALANCE DATE 8-12-77				

pg 15 of 18
NCR 1118 6-380 MAY 19 1980



April 24, 1980

JOY INDUSTRIAL EQUIPMENT COMPANY

NEW PHILADELPHIA DIVISION
338 SOUTH BROADWAY
P. O. BOX 431
NEW PHILADELPHIA, OHIO 44663

Bechtel Power Corporation
P.O. Box 2167
Midland, Michigan 48640

Attention: Mr. Bruce Reigelsperger

Subject : Bechtel P.O. #7220-M-157-AC
Bechtel NRC #118
JOY NPX-67486

H
Gentlemen:

In regard to the phone conversation between your Bob McLaughlin and myself, be advised as follows:

The Reliance Electric motor nameplate for motor part number 600288-331, Reliance I.D. number 3YF-882408 is rated at no load 3600 R.P.M. and 3540 R.P.M. with load for fan units OVV3A & OVV3B.

Our fan models are typically identified as 18-14-3500, the 18 being an 18" diameter fan, the 14 being the rotor hub diameter size, and the 3500 being the operation speed. This typical R.P.M. number was never intended to be "identical" to the motor speed only categorically.

Typically our fans are identified as 870 for synchronous, 900 R.P.M. motor design, 1170 for 1200 R.P.M., 1770 for 1800 R.P.M., and 3450 or 3500 R.P.M. for 3600.

We therefore propose changing the motor data sheet 600288-331 to read "R.P.M." at full load "3540", was "3500".

The AMCA test report X-646, and nuclear fan checklist for these units, namely SF-37718 and 37719, tag number OVV3A and OVV3B, remain correct as originally submitted.

-1-5

Continued . . .

MAY 2 1980

MAY 2 1980

NCR 1118 pg 15 of 18
6-15-80

Bechtel Power Corporation
Page 2
April 24, 1980

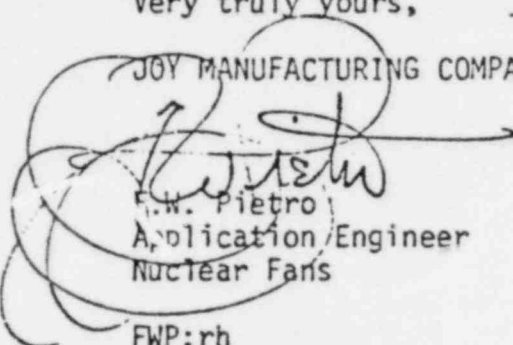
Pg 16 of TT¹⁰ 28
NCR 1118
2-3-80

A complete final documentation package is attached for your review with the motor data sheet change per above being the only change over the original submittal.

I trust this satisfactorily resolves this purported discrepancy.

Very truly yours,

JOY MANUFACTURING COMPANY



F.W. Pietro
Application Engineer
Nuclear Fans

FWP:rh

cc: CF/NPX-67486

NCR 1118 pg 16 of 18 9/8
4-13-80



May 12, 1980

Pg 17 of TT-92
NCR 1118
6-13-80

JOY INDUSTRIAL EQUIPMENT COMPANY

NEW PHILADELPHIA DIVISION
338 SOUTH BROADWAY
P. O. BOX 431
NEW PHILADELPHIA, OHIO 44663

Bechtel Power Corporation
P.O. Box 2167
Midland, Michigan 48640

Attention: Mr. Bruce Reigelsperger

Subject: Bechtel P.O. 7220-M-157-AC
JOY NPX-67486
NCR-1118

Dear Bruce:

In a phone conversation with Mr. Phil Jones, Ann Arbor he stated, a replacement nameplate for fan tag number 1VV68A was needed to satisfy NCR-1118. This tag to indicate Cfm at 175.

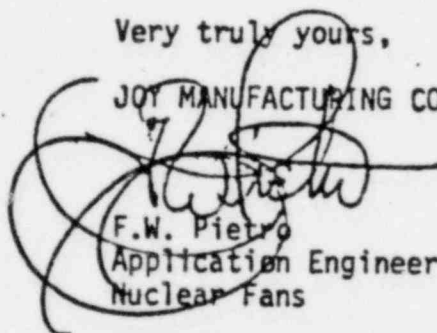
It was requested this be sent to your attention for handling.

Enclosed is a nameplate with the required information and attaching drive screws.

Thank you for your help in resolving this report.

Very truly yours,

JOY MANUFACTURING COMPANY


F.W. Pietro
Application Engineer
Nuclear Fans

FWP/df

cc: CF-NPX-67486-Folder #1
FWP/bf

~~Bechtel~~

MAY 14 1980

NCR 1118
pg 17 of 18
92
6-13-80



NONCONFORMANCE REPORT (CONT'D)

20. PAGE 18 OF 18 ²⁸ 6-13-80 19. NCR NO. 1118

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
X			
DOE. J. JAMES NOTES PROJECT FIELD ENGINEER for signature see page 6		6/12/80 DATE	
PROJECT ENGINEER		6-6-80 DATE	
PROJECT CONSTR QC ENGINEER		6-17-80 DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

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PROJECT ENGINEER		DATE	
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AUTHORIZED INSPECTOR		DATE	

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PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	



9-25-80
246
J. G. ...

NONCONFORMANCE REPORT

SK 0-ECC

1. PROJECT NAME MIDLAND		JOB NO. 7220		19. NO. 1120	20. PAGE 1 OF 2						
2. UNIT(S) COMMON OE-76A, OE-76D		4. ITEM DESCRIPTION FUEL POOL HEAT EXCHANGERS		5. ITEM LOCATION 5 LEV. 599.6 30.6' W. 6.6							
6. P.O. OR SPEC NO. M-55	7. SERIAL NO. N/A	8. REPLACEMENT PART N/A	9. SOURCE SUPPLIER	10. CONTRACTOR/SUPPLIER Y U B A							
11. INSPECTION CRITERIA <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		12. ASME AUTHORIZED INSPECTION RECD <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		14. Discovered During <input type="checkbox"/> Rec'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Eng <input type="checkbox"/> FLD							
16. NONCONFORMING CONDITION: DURING REMOVAL OF THE NOZZLE LOGS FROM HEAT EXCHANGERS OE-76A & OE-76D TWO DEEP GOUGES WERE NOTED. ONE GOUGE .075 DEEP IS LOCATED ON THE WEST NOZZLE OF "OE-76A" AT FIELD ① AND THE OTHER GOUGE .044 DEEP IS LOCATED ON THE EAST NOZZLE OF OE76D AT FIELD WELD ②. BOTH GOUGES ARE LOCATED IN THE TAPERED AREA OF THE NOZZLES.											
17. REPORTED BY A. J. Messey		18. VALIDATED BY J. B. ...		24. DISPOSITION CONCURRENCE							
DATE 12/19/77		DATE 12-19-77		25. DISPOSITION RESULTS							
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		22. X) Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering		<table border="1"> <tr> <th>reject</th> <th>repair</th> <th>use as is</th> </tr> <tr> <td></td> <td>STD</td> <td></td> </tr> </table>		reject	repair	use as is		STD	
reject	repair	use as is									
	STD										
<p>BLEND. GOUGES INTO SURROUNDING METAL, LOT WORKED AREA, AND WELD REPAIR IF NECESSARY IN ACCORDANCE WITH SPECIFICATION 7220-G-27 (Q), REV. 6, REPAIR PROCEDURE</p> <p>W. A. Swenson 12/20/77</p> <p>J. ... 12/20/77</p>											
23. PROJECT ENGINEERING DISPOSITION											
<p>① The gouged AREA LOCATED ON THE WEST NOZZLE OF OE-76A AT FIELD (N-3 NOZZLE) HAS BEEN REPAIRED IAW PROCEDURE ED-1. SEE QCIR'S FSK-MPA-64-BMR Log # 32601 AND FSK-MPA-64-BMR(a) Log # 62425. Block 25 CONTINUED on pg 4.</p> <p>CR August 6, 1980</p>											
26. ACCEPTANCE											
<p>DATE 7.1.80</p> <p>ENGINEER ...</p> <p>DATE 7-1-80</p> <p>AUTHORIZED INSPECTOR ...</p> <p>DATE</p>											

500
200
29
3
7
20
20

M



Q LIST ITEM NO. 4.141, 2 held TAGS APPLIED TO NOZZLES.
Hold for ENG. DISPOSITION

A CONDITIONAL RELEASE IS HEREBY GRANTED TO WELD NOZZLES TOGETHER. NOZZLES ARE RETRIEVABLE AFTER WELDING.

PFE J. Boon 12/20/77 DATE

PFQCE J. Barclay 12-20-77 DATE

LQAE J. L. Richard 12/20/77 DATE

LQAE J. L. Richard 12/20/77 DATE

Block 16 Con't.

A conditional release has been granted to allow welding of all large pipe, small pipe and supports. Corrections or removal can be accomplished without causing damage or contamination to associated plant equipment or structure.

PFE W. C. New 3-5-79 DATE

PFQCE W. C. Barclay 3-5-79 DATE

LQAE E. Smith 3/5/79 DATE

A.I. H. W. Koston 3-5-79 DATE

for

07

07

07



NONCONFORMANCE REPORT (CONT'D)

20. PAGE 3 OF ²⁸ ~~25~~ 25-80 19. NCR NO. 1120

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
		STP	
[Signature] PROJECT FIELD ENGINEER		1/28/80 DATE	
PROJECT ENGINEER		DATE	
[Signature] PROJECT CONSTR QC ENGINEER		1-30-80 DATE	
AUTHORIZED INSPECTOR		4/22/80 DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

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PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	



Block 25 continued

② The gouged area located on the east nozzle of OE-76D at FW2 (N-2 nozzle) has been reworked in accordance with Block 22 disposition. The gouged area was removed by grinding and buffing only. The gouged area was .044" deep, the nominal wall of the N-2 nozzle is .322", thus leaving an actual wall of .278". Minimum wall of the N-2 nozzle is 0.1812" per vendor TWX # 8102669497, dated 4-30-80. The worked area on the nozzle were PT inspected satisfactory. See NDE Report # 10257.

SR-Fugate 6.30.80



1821 M-55

BECHTEL MIDL

WU INFOMASTER 1-010316M121 04/30/30
TX YUBA FWHTR TUL
01 TULSA OK
TWX 3102669497 BECHTEL MIDL
BECHTEL POWER MIDLAND
ATTN: ANDY KILISZEK

SUBJECT: FUEL POOL HEAT TECHANGERS 0E-76-ABC
MIDLAND UN ITS 1 & 2
P. O. NO. 7220-M-55-AC
YUBA REF. 74-N-012

MINIMUM WALL THICKNESS FOR THE N-2 CHANNEL NOZZLE IS 0.1812 INCHES.

MINIMUM WALL THICKNESS FOR THE N-3 SHELL NOZZLE IS 0.1926 INCHES.

K. E. GLASS
YUBA HEAT TRANSFER CORP
TULSA, OKLAHOMA TLEX NO. 492447
YUBA FWHTR TUL
APRIL 30, 1930

0946 EST

BECHTEL MIDL

*NCR 1120
Pg 5 of 6*



*NER 1120
Pg 6 of 6*

CERTIFIED REPORT of NONDESTRUCTIVE EXAMINATION

CUSTOMER Bechtel Power Corporation		DATE 4-24-80
ADDRESS P.O. Box 2167 Midland, MI 48640 XRE 2303		CONTROL NO. OR REPORT NO. 4-24-80 LH 10258 10257
JOB OR PROJECT LOCATION Midland Nuclear Power Project	P.O. NO. 7220-FSC-206	PLAN OR DWG. NO. FSK-MPA-64
SURFACE CONDITION AS GROUND	HEAT NO. N/A	HEAT TREAT BEFORE <input checked="" type="checkbox"/> N/A AFTER <input type="checkbox"/>
TYPE OF EXAMINATION UT <input type="checkbox"/> MT <input type="checkbox"/> RT <input checked="" type="checkbox"/>	EXAMINATION STANDARD G-27	ACCEPTANCE STANDARD ASME Sec III
		TYPE OF MATERIAL S/S
		TEMP. OF MAT'L 8PC 2249 68°F EXP 6-14-80
		N.D.T. PROCEDURE NO. 3.23.A.1 Rev 2

ULTRASONIC EXAMINATION					
EQUIPMENT	TRANSDUCER	TEST BLOCK	METHOD USED N/A	SCANNING METHOD	SENSITIVITY LEVEL

MAGNETIC PARTICLE EXAMINATION							
EQUIPMENT	DRY <input type="checkbox"/>	VISIBLE <input type="checkbox"/>	AC <input type="checkbox"/>	DC <input type="checkbox"/>	AMPERAGE N/A	PROD. SPACING	PARTICLES - COLOR
	WET <input type="checkbox"/>	FLUORESCENT <input type="checkbox"/>	RECTIFIED <input type="checkbox"/>			HEAD <input type="checkbox"/>	COIL <input type="checkbox"/>

LIQUID PENETRANT EXAMINATION													
METHOD SOLVENT REMOVABLE	SKIN SKLS	PENETRANT BRAND NO. 78074	DWELL TIME 10 MIN	CLEANER BRAND NO. SKCS	BATCH NO. 72044	FRAND NO. ----	BATCH NO. N/A	EMULSIFIER EMULS. TIME ----	BRAND NO. SKDS	BATCH NO. 78033	DEV. TIME 7 MIN	DRY <input type="checkbox"/>	NON-AQUEOUS <input checked="" type="checkbox"/>
PART NO. HEAT EXCHANGER OF 76 A OF 76 B	TOTAL LENGTH EXAMINED		TYPE OF WORK		NO. OF ITEMS ACCEPTED		NO. OF ITEMS REJECTED						
FEET		INCHES		NEW <input type="checkbox"/>	REPAIR <input checked="" type="checkbox"/>	1		0					

C - Cracks	P - Porosity	NF - Non-Fusion	LI - Linear Indication	S - Slag	LA - Lamination	OTHER - Specify			
PC# OR SN#	ACC	REJ	DEFECT CODE	REMARKS	PC# OR SN#	ACC	REJ	DEFECT CODE	REMARKS
				1 EXCAVATION ADJ TO FW 2					PRIOR TO REPAIR WELDING
				14" DIA					
				B-66					

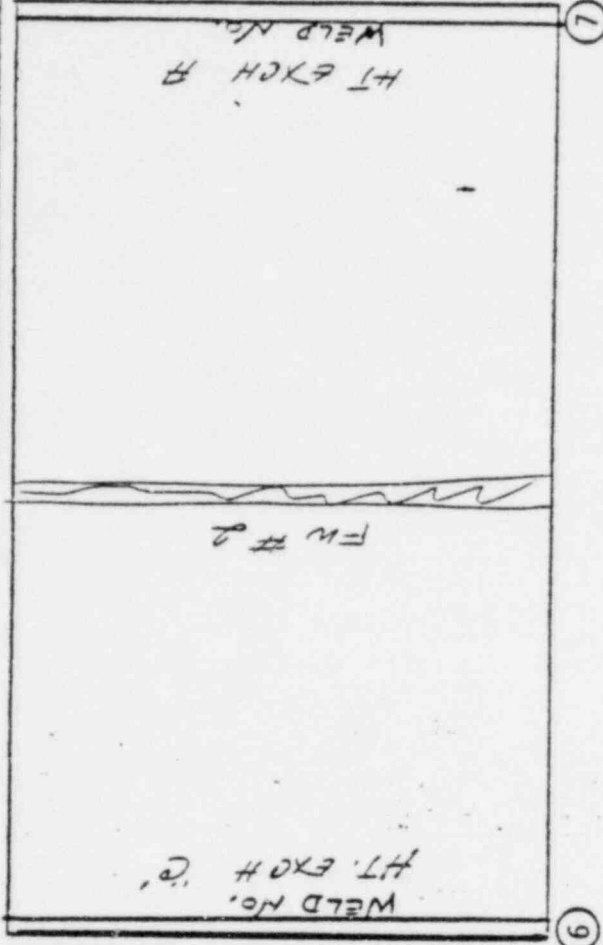
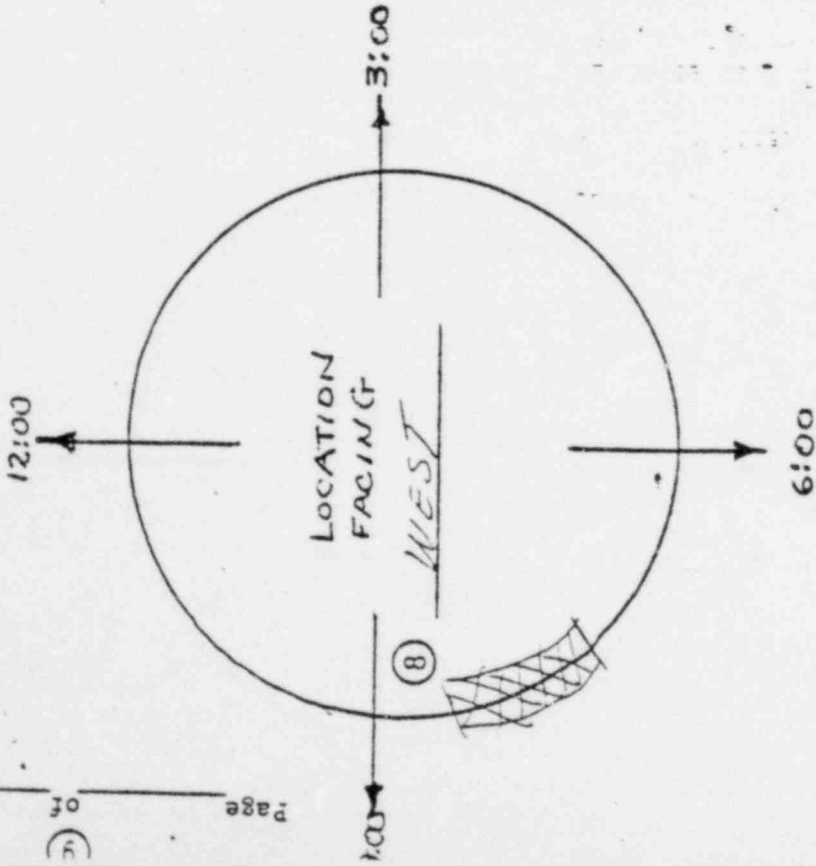
<p>_____ A.M. _____ _____ P.M. _____</p> <p style="text-align: center;">O U T</p> <p>_____ A.M. _____ _____ P.M. _____</p> <p>_____ Standby _____ Travel _____</p> <p>Total Hours _____ Total Mileage _____</p>	<p>Technician <u><i>Kurt Bunn</i></u> SNT-TC-1A Level <u><i>II</i></u></p> <p>Asst. Technician <u><i>NONE</i></u></p> <p>Customer <u><i>E.R. Stambic</i></u> <u><i>LI</i></u></p> <p>Witnessed by <u><i>NONE</i></u></p> <p>ENCLOSURE ADDED Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p> <p>Page <u><i>1</i></u> of <u><i>2</i></u></p>
---	--

REVIEWED

WVM
7-1-80

RECORD OF LOCATION FOR TEMPORARY ATTACHMENTS AND BASE METAL REPAIR

- ① QCIR # ESK-MPA-64-BMET ② Log # 60684
- ③ Weld Procedure PF-TAG ④ Repair Procedure PF-T-A9
- ⑤ NDE Requirements PT-SR-ASME



REVIEWED

REMARKS: EXCAVATION AREA ONLY
AREA FLAGGED
AREA CIRCLED IN BLACK MARKER
 PAGE 2 OF 2
 NDE REPORT # 102507
4-24-80

DATE: 5/8/80
 BY: Joe Cabral



Block 16 Continued:

- 12-123 WAS REPORTED ON FIELD ENGINEER'S REPORT E-088 AND
 - 22-144 WAS REPORTED ON FIELD ENGINEER'S REPORT DATED 5/25/78.
 - 12-123 WAS REPORTED ON ELECTRICAL DR # 180.
 - 22-144 WAS REPORTED ON ELECTRICAL DR # 218.
- THE 2-DAY MAINTENANCE INSPECTION CAN NOT BE COMPLETED.



NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 07220		19. NO. 1759	20. PAGE 1 OF 2	
2. UNIT(S) 1&2	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Main Control Boards	5. ITEM LOCATION N/A		
6. P.O. OR SPEC NO. J-201 - AC	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO N/A		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Magnetics	
11. INSPECTION CRITERIA () DWG () SPEC (X) OTHER		IR NO. N/A NO. BEBC 2606	12. A. ME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client (X) Eng () FLD
16. NONCONFORMING CONDITION: Q Material on this PO has been identified by Project/ Quality Engineering to be indeterminate in regards to satisfactorily completion qualification test requirements per spec. J-201. Q # 5.031. No hold tags applied.				24. DISPOSITION CONCURRENCE rework reject repair use as is X		
17. REPORTED BY <i>Robert A. May</i>		DATE 1-9-79	18. VALIDATED BY <i>W. Barclay</i>		DATE 1-9-79	
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)						
22. () Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering Field project engineer to evaluate <i>V.R. Gaden</i> 1-12-79						
23. PROJECT ENGINEERING DISPOSITION Use as is; Resolution of QTR questions is as follows: Q1: All Magnetics Qualification to IEEE 344-71 is done by computer and has stated conclusion appears OK. Computer programs not checked. A1: All Magnetics seismic analysis reports were checked and approved by Anamet Laboratories and certified the accuracy of the report as shown by the seal of a professional engineer.						
26. (X) ACCEPTANCE <i>[Signature]</i>				DATE 2-17-80		
AUTHORIZED INSPECTOR				DATE		



Block 16 Continued.

A conditional release is granted to install the Q Material on this NCR. Corrections or removal can be accomplished without causing damage or contamination to the associated plant equipment or structure.

W. Tiller ASB 1-12-79
PFE Date

W. Barclay 1-12-79
PFQCE Date

L. Smith 1-12-79
LQA Date

BLOCK 23 CONTINUED

Q2: Vendor to submit certificate of conformance for IEEE 323-74. Should request back up data.

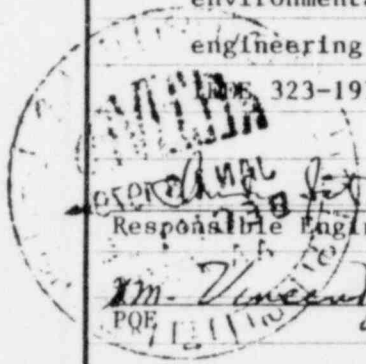
A2: The control panels purchased under purchase order 7220-J-201-AC were qualified according to the qualification test requirements as specified in Spec. 7220-J-201, except for the specific environmental equipment qualification in accordance with IEEE 323 which was added to the specification after all the panels were shipped to the jobsite. A specification change will be made to delete this added requirement. Justification for this action is as follows:

The safety related equipment purchased under this purchase order is located in areas where stable, mild environmental conditions are anticipated. Consequently, in accordance with FSAR Table 3.11-4, Test 17, engineering is not requiring the panel vendor to perform the specific environmental qualification test per IEEE 323-1974.

[Signature] 4/17/80
Responsible Engineer Date

[Signature] 4/17/80
Group Supervisor Date

[Signature] 4/17/80
PQE Date





NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 07220			19. NO. 1760	20. PAGE 1 OF 2		
2. UNIT(S) 1&2	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Auxiliary/Local Control Panels		5. ITEM LOCATION N/A			
6. P.O. OR SPEC NO. J-202 - AC	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Harlo			
11. INSPECTION CRITERIA () DWG () SPEC (X) OTHER		IR NO. N/A NO. BEBC 2606	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO		13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client (X) Eng () FLD	
16. NONCONFORMING CONDITION: Q Material on this PO has been identified by Project/ Quality Engineering to be indeterminate in regards to satisfactorily completion qualification test requirements per spec. J-202. Q # 5.032. No hold tags applied.					24. DISPOSITION CONCURRENCE			
					rework	reject	repair	use as is
					<i>W. J. Viles</i> 4-25-80 PROJECT FIELD ENGINEER DATE <i>L. H. M. Blotz</i> 4-21-80 PROJECT ENGINEER DATE <i>W. R. Barclay</i> 4-29-80 PROJ CONSTR QC ENGINEER DATE AUTHORIZED INSPECTOR DATE			
17. REPORTED BY <i>Robert X. May</i>		DATE 1-9-79	18. VALIDATED BY <i>W. R. Barclay</i>		DATE 1-9-79			
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)								
22. () Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering Project engineer to evaluate <i>V. R. Gaden</i> 1-12-79								
23. PROJECT ENGINEERING DISPOSITION Use as is: Resolution of QTR questions is as follows: J-202-79-1 is seismic calculation. Appears OK. Calculation not checked.								
All: This document was checked and approved by Analytical Engineering Associates and certified the accuracy of the information as shown by the seal of a professional engineer.					26. OC ACCEPTANCE <i>W. R. Barclay</i> 7-17-80 OC ENGINEER DATE AUTHORIZED INSPECTOR DATE			



Block 16 Continued.

A conditional release is granted to install the Q Material on this NCR. Corrections or removal can be accomplished without causing damage or contamination to the associated plant equipment or structure.

W. Miller DOB 1-12-79
PFE Date

W. Barclay 1-12-79
PFQCE Date

E. Smith 1-12-79
LQAE Date

BLOCK 23 CONTINUED

Q2: Harlo is going to submit certificate of compliance for IEEE 323-1974. Should request back up documentation for certificate. Has not been received as of 10/31/78.

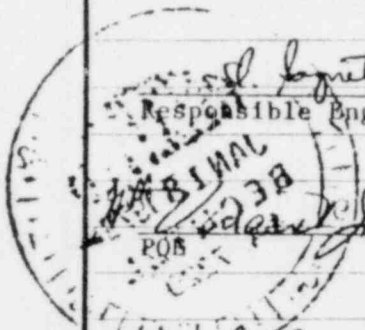
A2: The control panels purchased under purchase order 7220-J-202-AC were qualified according to the qualification test requirements as specified in specification 7220-J-202.

The safety related equipment under this order is located in areas where stable, mild environmental conditions are anticipated. Consequently, in accordance with FSAR Table 3.11-4, Test 17, engineering has not required the vendor to perform the specific environmental qualification test per IEEE 323-1974.

W. L. Lynton 4/17/80
Responsible Engineer Date

W. L. Lynton 4/17/80
PQB Date

J. M. Anderson 4/17/80
Group Supervisor Date





NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 07220		19. NO. 1796	20. PAGE 1 OF 4	
2. UNIT(S) 1 & 2	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION Electric Hydrogen Recombiners	5. ITEM LOCATION N/A		
6. P.O. OR SPEC NO. M-169 - AC	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Westinghouse	
11. INSPECTION CRITERIA () DWG () SPEC (x) OTHER		IR NO. N/A NO. BEBC 2606	12. ASME AUTHORIZED INSPECTION REQ'D () YES (x) NO	13. SKETCH ATTACHED () YES (x) NO	14. Discovered During () Rec'g (x) Const () Test	15. Equip Furnished By () Client (x) Eng () FLD
16. NONCONFORMING CONDITION: Q Material on this PO has been identified by Project/ Quality Engineering to be indeterminate in regards to satisfactorily completion qualification test requirements per spec. M-169. Q # 4.533, 4.623.				24. DISPOSITION CONCURRENCE rework reject repair use as is <i>J. G. [Signature]</i> 5/19/80 PROJECT FIELD ENGINEER DATE <i>[Signature]</i> 5-6-80 PROJECT ENGINEER DATE <i>[Signature]</i> 5/20/80 PROJ CONSTR QC ENGINEER DATE AUTHORIZED INSPECTOR DATE		
17. REPORTED BY <i>[Signature]</i>		DATE 1-9-79	18. VALIDATED BY <i>[Signature]</i>		DATE 1-9-79	
21. ROUTING: (x) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)						
22. () Field Engineering Disposition (x) Field Engineering Recommended Disposition to Project Engineering Project Engineering to evaluate. D. Short 1-12-79						
23. PROJECT ENGINEERING DISPOSITION Use as is; QTR questions were resolved as follows: Q1 Specification 7220-M-169, Rev 2, Paragraph 7.2.4 addresses sodium thiosulphate as the chemical spray. The Midland FSAR Section 6.2 Paragraph 6.1.1.2 states that hydrazine is the chemical to be used. Has an analysis been performed to assure that there would be no adverse effect on the material, component etc to be used? (Qualification of the hydrogen recombiner was based on the use of sodium tetraborate.)						
26. ACCEPTANCE <i>[Signature]</i> ENGINEER					DATE 2/15/80	
AUTHORIZED INSPECTOR					DATE	



Block 16 Continued.

A conditional release is granted to install the Q Material on this NCR. Corrections or removal can be accomplished without causing damage or contamination to the associated plant equipment or structure.

PFE

Date

PFQCE

Date

LQAE

Date

R1 CPGCo has directed that no retesting with hydrazine be performed (Serial 5025 3/21/78). Test spray of sodium retriborate is considered acceptable.

Q2 Specification 7220-M-169, Rev 2 Paragraph 6.B.2 states "use 1% damping for OBE conditions." Vendor Prints 7220-M-169-39-1, 40-1, and 41-1 only addresses a minimum of 2%.

R2 Valves used by the vendor are well within allowable 1% damping curves of G-7. This is acceptable.

Q3 The radiation dose rates delineated in Paragraph 6.11 of Specification 7220-M-169, Rev 2 and Appendix are in conflict with those called out in FSAR Vol 9, Page 3A-121 (2×10^8 rad)

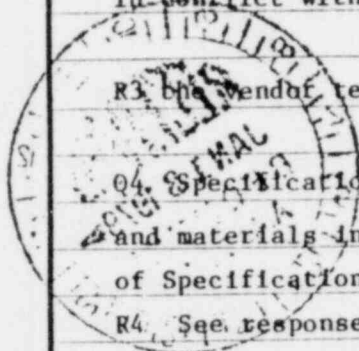
R3 The vendor test program is based on 2×10^8 rads (M-169-7). This is acceptable.

Q4 Specification 7220-G-26, Rev 1 Paragraph 4.0 states in part, "the design radiation dose for equipment and materials inside the containment is 0.8×10^7 and . . ." this contradicts Paragraph 6.11 and Appendix A of Specification 7220-M-169, Page 1 of Specification 7220-J-1564 and FSAR commitment Section 3A, Page 3A-121.

R4 See response in Item 3.

Q5 Vendor Prints M169-G-1, 9-1, 10-1, 11-1 were all given a Status Level 5 (Approval ct Required, Manufacturing May Proceed). These vendor prints are considered supplements to the main document WCAP-7769-L

(M-169-5-2)





along with M-169-6-2 and 7-2. Therefore these documents should have been reviewed and assigned the appropriate status. In addition, the NRC has performed a review of the above documents and also states that WCAP-7709-6 as a supplement forms the entire qualification package. (See letter from the U.S. Nuclear Regulatory Commission, D. Vassallo to C. Eicheldingek, dated May 1, 1975, contained in Vendor Print M-169-10-1, Page A-3 and A-4.

R5 The NRC has accepted the Westinghouse qualification reports on a generic basis. Detailed review by Bechtel is not considered necessary.

Q5.A The following is a listing of problems or noncompliances found in review of the vendor prints which were reviewed and were later addressed in the vendor prints which were given as Status 5.

Q5.A.1 Specification M-169, Paragraph 5.4 states in part the equipment shall be capable of withstanding a life time of 100 full test cycles. Contrary to this requirement, Vendor Print M-169-7-2 (Status 1) Paragraph 3.2 states in part, "the first production recombiner was subjected to 80 heatup and cooldown cycles. . ." So it appears that this would be in conflict with the specification. It is not until you get to Vendor Print M-169-11-1 (Status 5) Paragraph G.3.2 (P combiner) that you find that the recombiner was subjected to approximately 30 more thermal cycles which put it in compliance to Specification requirements.

R5.A.1 No response is necessary.

Q5.A.2 Specification M-169, Paragraph 4.2 requires compliance to IEEE 344-1975. It is not until you get to Vendor Print M-169-10-1 do you find out that the qualification was conducted to the IEEE standard. (See Paragraph 3-11).

R5.A.2 No response is necessary.

Q5.A.3 Specification M-169, Paragraph 4.2 also requires compliance to IEEE-384-1974 is this required and if so, were is the evidence to show that it has been done.

R5.A.3 Vendor Print 7220-M-169-64-1 provides the compliance statement.



Q5.A.4 Vendor Print M-169-7-2 (Status 1) Table A-1 states maximum sheath temperature 1550°. It is not until you get to Vendor Print M-169-8-1 (Status 5) Paragraph 3.1.1 do you find out it was subjected to a temperature of 1700 - 1750° which is in compliance with Specification M-169 Appendix A.

R5.A.4 No response is required.

Q6 IEEE 323-1974, Section 8, Paragraph 8.3(4)C requires description of test facility and instrumentation used including calibration records reference. Contrary to this, no calibration records can be found.

R6 Vendor Print 7220-M-169-64-1 states that this data is available.

GS John D Anderson 5/2/80
DATE

PQE Z.J. Monte 5/5/80
DATE

PE Edward J. ... 5-6-80
DATE

NONCONFORMANCE REPORT

S/U 2-BCA

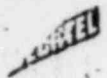
1. PROJECT NAME Midland		JOB NO. 7220			19. NO. 1800	20. PAGE 1 OF 2	
2. UNIT(S) 2	3. DRAWING/PART NO. FSK-M-2FCB-54-2		REV 0	4. ITEM DESCRIPTION 2 FCB-54, Socket Weld No. 1		5. ITEM LOCATION Aux. Bldg.	
6. P.O. OR SPEC NO. 7220-M-204	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Const.	10. CONTRACTOR/SUPPLIER N/A		
11. INSPECTION CRITERIA () DWG (X) SPEC () OTHER		IR NO. NO. M-204	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES () NO		13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client (X) Eng () FLD
16. NONCONFORMING CONDITION: Welding Procedure Specification, P8-T-Ag, Rev. 2 is specified on the Field Welding Checklist, Form WR-5A for socket weld no. 1 at the decay heat exchanger no. 2E60B and ER309 filler material was used. The socket weld half coupling at the shell side of the heat exchanger is carbon steel (P1) material. The piping material installed per FSK-M-2FCB-54-2 is stainless steel (P8) material. Note 20 of Form-84-Mechanical in Specification (cont.)				24. DISPOSITION CONCURRENCE			
17. REPORTED BY J.R. Barbee				DATE 1/10/79	VALIDATED BY J.W. Barclay		DATE 1-10-79
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)				25. DISPOSITION RESULTS			
22. () Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering				AS PER FIELD ENGR'S DISPOSITION IN BLOCK 22, THE DRAIN CONNECTION IS SCRAPED FROM 2E-60B. THE PIPING MATERIAL IS INSTALLED PER FSK-M-2FCB-54-2 Rev 2, TRANSMITTAL # P-1198 TO 2E-60A.			
Cut out and reweld using the correct documentation as required by Specification 7220-G-27Q and FSK-M-2FCB-54-2. There is no documented evidence that the weld in question was made using the proper filler material and welding procedure for the materials involved. See page 2 for revised disposition				DOCUMENTATION OF S.W.#1 NOW REFERRED AS S.W.#18 AS PER TRANSMITTAL # P-1198 IS SCOPED ON QCIR # M-100 FSK-M-2FCB-54-2 (A) LOG # 58090. AC: [Signature] 5/1/79			
23. PROJECT ENGINEERING DISPOSITION				26. ACCEPTANCE [Signature] 5-6-79 QC ENGINEER [Signature] 7/5/79 AUTHORIZED INSPECTOR			

See pg 3 for CONCURRENCE

INITIAL

CORRECTED IN FIELD 6-1-79

Block 26: ACE
Ch. Fugate 7-24-80



Block 16 cont.:

7220-G-27(Q) does not list Welding Procedure Specification P8-T-Ag for welding carbon steel (P1) material to stainless steel (P8) material.

1 Hold tag applied, "Q" No. 4,114
Hold for Engineering Disposition.

22. Revised field engineering disposition (rework)

FSK-M-2 FCB-54-2 Rev 0 was designed and installed to the wrong equipment connection. Remove and scrap existing pipe and install (New pipe) to correct connection per FSK-M-2 FCB-54-2 Rev 1. 9-25

Sam [Signature] 9-29-79



NONCONFORMANCE REPORT (CONT'D)

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		9/29/79	DATE
PROJECT ENGINEER		9-27-79	DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR		9-27-79	DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR OC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE



NONCONFORMANCE REPORT

S/A 132-ABA 1826 1-2-79

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1023	20. PAGE 1 OF 4
2. UNIT(S) 1 & 2	3. DRAWING/REVISED Tag No. 1PV-3101A & B, 2PV-3201A	REV	4. ITEM DESCRIPTION Atmospheric Steam Dump Valves	5. ITEM LOCATION Whse. # 1	
6. P.O. OR SPEC NO. 7220-J-253-AC Rev. 5	7. SERIAL NO. 17419-1-1,2,3	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____		9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Babcock & Wilcox Control Components, Inc.
11. INSPECTION CRITERIA () DWG (x) SPEC () OTHER		IR NO. R-1,00-4478 NO. J-253 Rev. 3	12. ASME AUTHORIZED INSPECTION REQ'D (x) YES () NO	13. SKETCH ATTACHED (x) YES () NO	14. Discovered During (x) Rec'g () Const () Test
15. NONCONFORMING CONDITION: Item 1. Specification 7220-J-253 Rev. 3 Para. 13.3 requires		24. DISPOSITION CONCURRENCE			
a metal tag showing the following information; a) Bechtel Purchase Order Number		rework		reject	repair
b) Bechtel Item Number c) Valve I.D. number. (See Attachment) Contrary to the		PROJECT FIELD ENGINEER		DATE	
above, the tags for the valves listed above contain the wrong Item Number and Valve		PROJECT ENGINEER		DATE	
I.D. Number.		PROJECT CONSTR QC ENGINEER		DATE	
		AUTHORIZED INSPECTOR		DATE	
		Continued on Page 2			
17. REPORTED BY Dean A. Delaney 1/19/79		18. VALIDATED BY J. B. Bureley 1-20-79		25. DISPOSITION RESULTS	
21. ROUTING: (x) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)				ITEM 1 - corrected TAGS	
22. (x) Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering				Received, reviewed and	
Procurement Supervisor to obtain correct tagging and documentation				value have been retagged.	
for the KH subject valves.				ITEM 2 - Radiographs	
				have been received, &	
				have been filed.	
				ITEM 3, - Corrected	
				documentation received	
				reviewed & accepted.	
				S. J. [Signature]	
				7/9/80	
23. PROJECT ENGINEERING DISPOSITION				26. QC ACCEPTANCE	
				QC ENGINEER	
				AUTHORIZED INSPECTOR	
				DATE	
				DATE	

2/7/79
SEE S. M.

R



NONCONFORMANCE REPORT (CONT'D)

20 PAGE 2 OF 4

db 8/21/79
19 NCR NO

1826
323

Block 16 Continued

Item 2. Specification 7220-J-253 Rev. 3, Para. 15.0 & 15.2 requires results of all non-destructive examinations including a complete set of radiographs to be submitted to the Buyer prior to or with shipment of the valves. Contrary to the above, no RT. film has been received for the valves as listed above.

Item 3. Quality Verification Documentation & Form G-321-D have the following discrepancies: For each valve package the vendor mistakenly counted Weld Rod MTR's in G-321-D Doc. Cat. # 12.0 (Welding Verification Reports). There is no traceability for the Weld Rod MTR's and the Minimum wall Thickness Reports have the wrong P/N listed for the valve body. For valve 1PV-3101A the G-321-D Form Doc. Cat. # 22.0 requirements have not been met. For valve 2PV-3201A the Valve Actuator Performance Report has been mistakenly counted in Doc. Cat. # 24.0 (Pressure Test).

"Q" number is 5.021. Hold pending final disposition. 3 hold tag(s) applied to the nonconforming item(s).

Block 16 continued:

A conditional Release for Valves 1PV-3101A & B and 2PV-3201A is requested. Valves are retrievable after installation. Corrections or removal can be accomplished without

causing damage or contamination to Associate plant equipment or structural.

W. Neer 8/23/79
PFE Date

R.C. Haller 8/24/79
LQAE Date

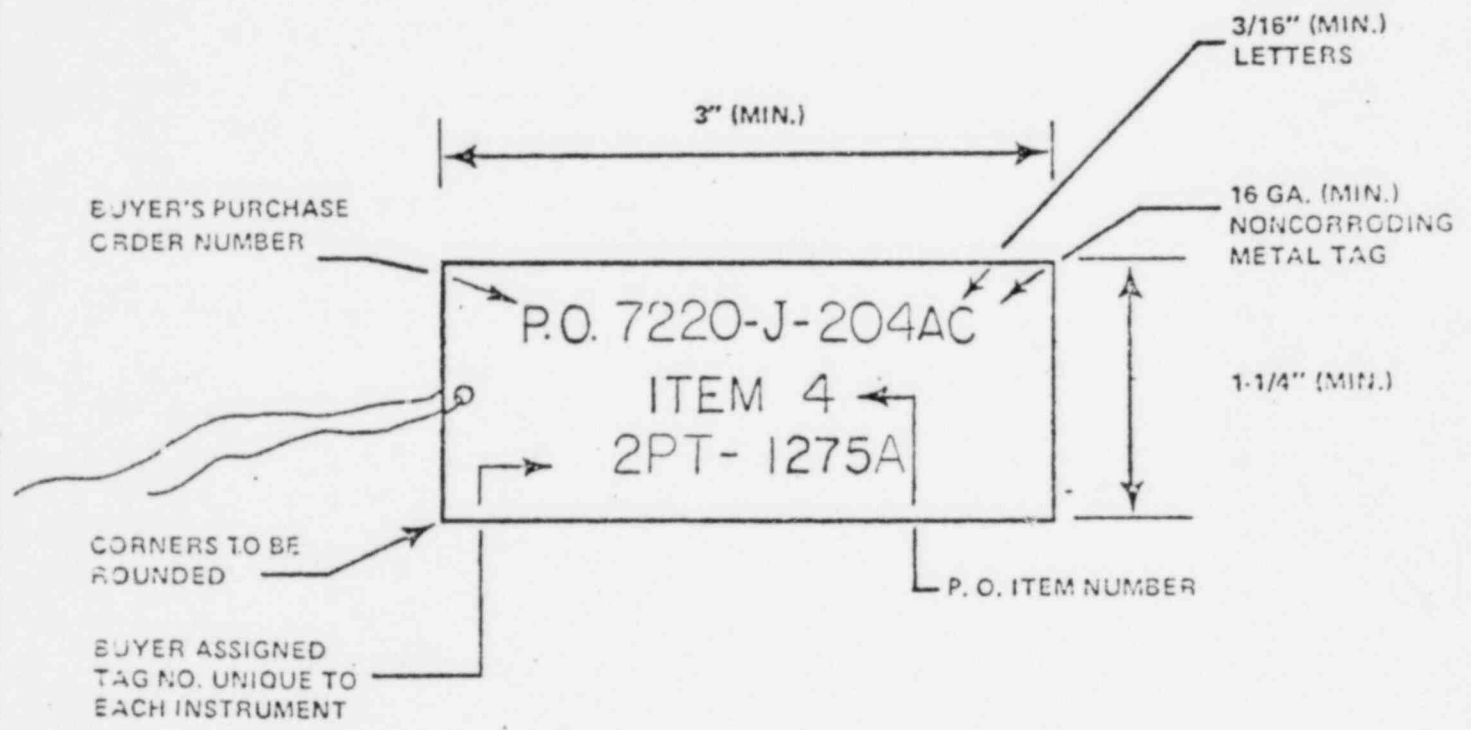
W. Russell 8/23/79
PFE Date

Patrick Regard 8-24-79
AI Date

EACH INSTRUMENT, CONTROL VALVE, ELECTRICAL DEVICE AND LOOSE ACCESSORY SHALL BE TAGGED WITH A NONCORRODING METAL TAG AS SHOWN BELOW AND SECURELY AFFIXED TO THE INSTRUMENT BY PINS, METAL SCREWS, OR STAINLESS STEEL WIRE.

TAGGING INFORMATION SHALL INCLUDE THE BUYER'S PURCHASE ORDER NUMBER, P.O. ITEM NUMBER, AND BUYER'S IDENTIFICATION NUMBER, STAMPED ON THE TAG.

TYPICAL TAGGING INFORMATION IS SHOWN BELOW. THE SELLER SHALL REFER TO THE PURCHASE ORDER FOR SPECIFIC NUMBERS TO APPEAR ON EACH TAG.



(THIS FORM IS FOR ATTACHMENT TO MATERIAL REQUISITIONS FOR INSTRUMENTS, CONTROL VALVES, MECHANICAL PACKAGE UNITS, AND EQUIPMENT CONTAINING INSTRUMENTS.)

ATTACHMENT D TO DESIGN SPECIFICATION 7220-J-253

		25/74	Issued as Project Standard				
No.	DATE	REVISIONS		BY	CHK.	DESIGN SUPV	APPD
SCALE	DESIGNED	DRAWN		OFFICE CHIEF		ARCH	CHIEF
ORIGIN CS BPD SPD TFO			<p style="text-align: center;">INSTRUCTIONS FOR INSTRUMENT TAGGING</p>		JOB NO. 7220		
				DRAWING NO.		REV	
				7220-J-599		C	
				SHEET 1		OF 1	

If concurrent and the design it covers are the property of BECHTEL, then no modification and on the borrower's express agreement that they will be produced, copied, loaned, exhibited, nor used except in the limited way and in accordance with the written consent given by the lender to the borrower.

J4-10219/74



NONCONFORMANCE REPORT (CONT'D)

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
Doc			
<u>[Signature]</u>		<u>2-14-79</u>	
PROJECT FIELD ENGINEER		DATE	
<u>[Signature]</u>		<u>2-15-79</u>	
PROJECT ENGINEER		DATE	
<u>[Signature]</u>		<u>2/12/80</u>	
PROJECT CONSTR QC ENGINEER		DATE	
<u>[Signature]</u>			
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	



Start Up Code: 2ABA

NONCONFORMANCE REPORT

K2B
11-6-79

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 1918	20. PAGE 1 OF 2	
2. UNIT(S) 1 & 2	3. DRAWING/REFERENCE Tag No. 2PV-3201 B	REV N/A	4. ITEM DESCRIPTION Atmospheric Steam Pump Valves	5. ITEM LOCATION Whse. # 1		
6. P.O. OR SPEC NO. 7220-J-253-AC Rev. 5	7. SERIAL NO. 17419-1-4	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____	9. SOURCE Supplier	10. CONTRACTOR/SUPPLIER Babcock & Wilcox Control Components, Inc.		
11. INSPECTION CRITERIA () DWG (X) SPEC () OTHER		IR NO. R-1.00-8807 NO. J-253 Rev. 4	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES () NO	13. SKETCH ATTACHED (X) YES () NO	14. Discovered During (X) Rec'g () Const () Test	15. Equip Furnished By () Client (X) Eng () FLD
16. NONCONFORMING CONDITION: Item 1. Specification 7220-J-253 Rev. 4 Para. 13.3 requires a metal tag showing the following information: a.) Bechtel Purchase Order Number, b.) Bechtel Item Number, c.) Valve I.D. Number. (See attachment) Contrary to the above, the tags for the valves listed above contain the wrong item number and valve I.D. Number.			24. DISPOSITION CONCURRENCE			
Continued on Page 2			rework	reject	repair	use as is
			PROJECT FIELD ENGINEER <i>[Signature]</i>		DATE 3-5-79	
17. REPORTED BY <i>[Signature]</i> 2-28-79			18. VALIDATED BY <i>[Signature]</i> 2/28/79		25. DISPOSITION RESULTS	
			21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)		ITEM 1 - corrected TAGS received, reviewed and values have been relagged.	
22. (X) Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering			Procurement Supervisor to obtain correct documentation and tags in accordance with spec. 7220-J-253.		ITEM 2 - Radiographs have been received & have been filed.	
23. PROJECT ENGINEERING DISPOSITION			V.R. Gaden 3-1-79		ITEM 3 - corrected documentation has been received, reviewed & accepted.	
			7/9/80		26. QC ACCEPTANCE <i>[Signature]</i> 7/9/80	
			QC ENGINEER <i>[Signature]</i> 7-9-80		DATE	
			AUTHORIZED INSPECTOR <i>[Signature]</i>		DATE	



NONCONFORMANCE REPORT (CONT'D)

20PAGE 2 OF 84 ^{K25} 11-6-79 19NCR NO 1918

Block 16 Continued

Item 2. Specification 7220-J-253 Rev. 4 Para. 15.0 & 15.2 requires results of all non-destructive examinations including a complete set of radiographs to be submitted to the buyer prior to or with shipment of the valves. Contrary to the above, no RT Film has been received for the valve listed above.

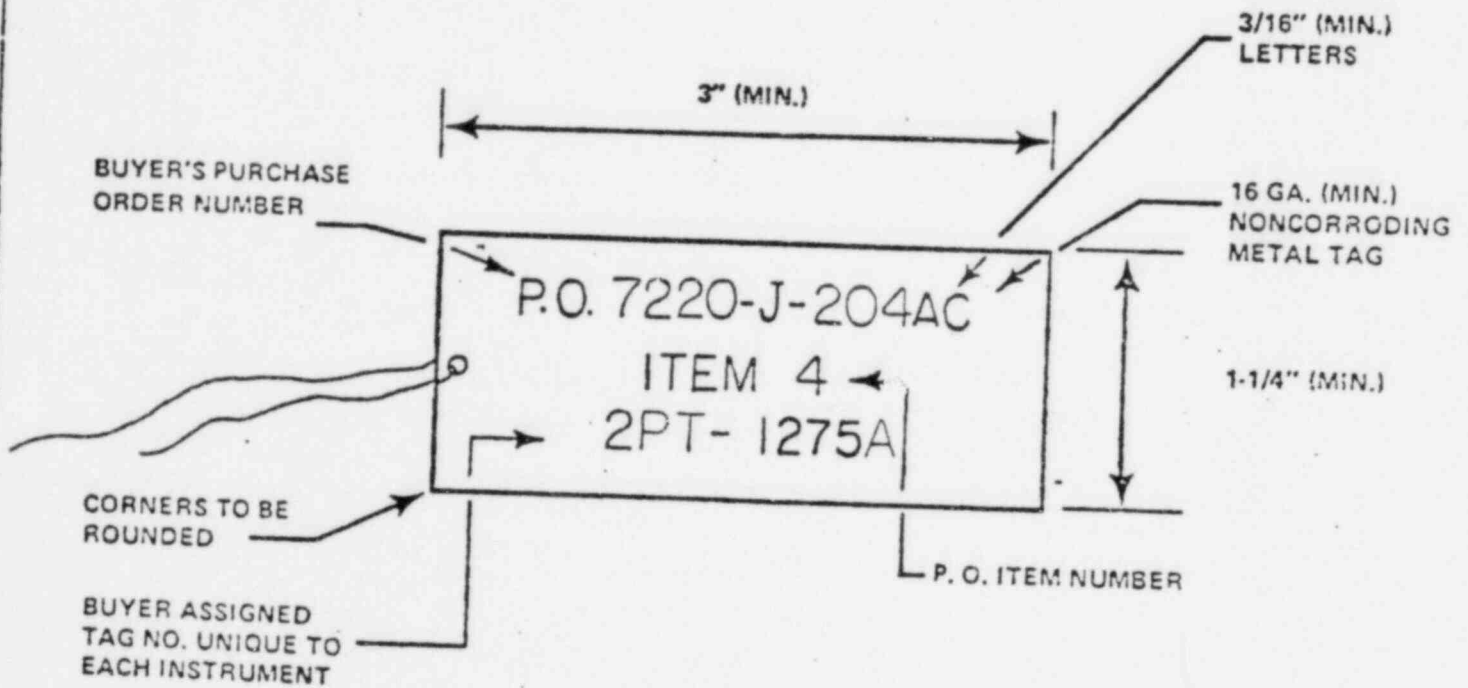
Item 3. Quality Verification Documentation & Form G-321-D have the following discrepancies: For the valve package the vendor mistakenly counted cat. # 16 (Heat treatment procedure & verification) vendor counted 2 when in fact 4 were received, Cat. # 14 (Repair Procedure and Verification) vendor counted 1 when in fact none were received, Cat. # 18.0 (Code Compliance) vendor states 3 pages in fact 4 pages were received, No mention of Cat. # 17.4 (Material Certificate of Compliance) 7 pages received.

"Q" number is 5,021. Hold pending final disposition. 1 hold tag applied to the nonconforming item(s).

EACH INSTRUMENT, CONTROL VALVE, ELECTRICAL DEVICE AND LOOSE ACCESSORY SHALL BE TAGGED WITH A NONCORRODING METAL TAG AS SHOWN BELOW AND SECURELY AFFIXED TO THE INSTRUMENT BY PINS, METAL SCREWS, OR STAINLESS STEEL WIRE.

TAGGING INFORMATION SHALL INCLUDE THE BUYER'S PURCHASE ORDER NUMBER, P.O. ITEM NUMBER, AND BUYER'S IDENTIFICATION NUMBER, STAMPED ON THE TAG.

TYPICAL TAGGING INFORMATION IS SHOWN BELOW. THE SELLER SHALL REFER TO THE PURCHASE ORDER FOR SPECIFIC NUMBERS TO APPEAR ON EACH TAG.



(THIS FORM IS FOR ATTACHMENT TO MATERIAL REQUISITIONS FOR INSTRUMENTS, CONTROL VALVES, MECHANICAL PACKAGE UNITS, AND EQUIPMENT CONTAINING INSTRUMENTS.)

ATTACHMENT D TO DESIGN SPECIFICATION 7220-J-253

9/25/74		Issued as Project Standard							
No.	DATE	REVISIONS		BY	CHK	DESIGN SUPV	ARCH	PROJ ENGR	APP
SCALE		DESIGNED		DRAWN		OFFICE CHIEF		TPO CHIEF	
ORIGIN CS BPD/GPD TPO			<p>INSTRUCTIONS FOR INSTRUMENT TAGGING</p>			JOB NO. 7220			
						DRAWING NO.		REV	
						7220-J-599		0	
						SHEET 1		OF 1	

JA-102(8/74) reduced, copied, loaned, exhibited, nor used except in the limited way a private use permitted by any written consent given by the lender to the borrower's express agreement that it is merely loaned and on the borrower's express agreement that it is merely loaned and on the borrower's express agreement that it is merely loaned...

Block 16 continued:

A conditional release is requested to install subject valves. Corrections or removal can be accomplished without causing damage or contamination to associated plant equipment or structure.

ABos 11-7-79
PFE Date

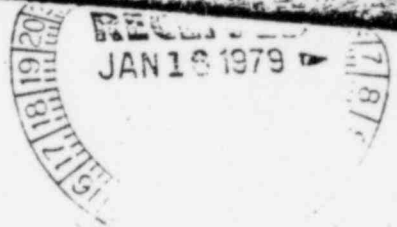
R.C. Hollan 11/7/79
LQAE Date

W.D. Barclay 11-2-79
PFQCE Date

W.M. Dargatzis 11-7-79
AI Date

BECHTEL MIDL

10743 BGR
WI INFOMASTER 1-018161A015 01/15/79
TWX BECHTEL SF
044 SAN FRANCISCO CA CHG:7220 8XB1035
TWX 8102669497 BECHTEL MIDL



ATTN: J F NEWGEN, BPC, MIDLAND, MI
R L CASTLEBERRY, BPC, ANN ARBOR, MI
P.O.#
7220-J-253-AC
REFERENCE: QSR #300

REV #
5

SUPPLIER
CONTROL COMPONENTS

CITY
IRVINE

STATE
CA

P.O. ITEM	QTY	DESCRIPTION	ID NUMBER
1	1	600 LB. ANSI AIR OPERATED ATMOSEPHERIC STEAM DUMP VALVE	2PV-3201-B

DATE RELEASED FOR SHIPMENT: 1-12-79

WITH THE FOLLOWING EXCEPTIONS: SDDR #01 DATED 6/3/78, APPROVED 6/16/78. SDDR #02 DATED 8/29/78, APPROVED 9/5/78. SDDR #03 DATED 11/17/78, APPROVED 11/28/78. SDDR #04 DATED 11/17/78, APPROVED 11/20/78.

X SUPPLIER'S STATEMENT OF CONFORMANCE NOT REQUIRED BY P.O. DOCUMENTATION PACKAGE MAILED TO JOBSITE ATTN: WITH HARDWARE ON 1-12-78.

H J DOMINIK
1-15-79/1517

1841 EST

BECHTEL MIDL



NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 2618 2019	20. PAGE 1 OF 1		
2. UNIT(S) 2	3. XXXXXXXXXX PART NO. 620-00121	REV	4. ITEM DESCRIPTION 1 Differential Pressure Transmitter	E. ITEM LOCATION #1 - 500' Class A Storage approx. "H" Line @ 6.4			
6. P.O. OR SPEC NO. M 1.35	7. SERIAL NO. See Blk. 16	8. REPLACEMENT PART P/N N/A REV	SER NO.	9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A		
11. INSPECTION CRITERIA () DWG () SPEC (X) OTHER		IR NO R-2,00-96 NO PQCI-R-2,00 Rev. 4	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By (X) Client () Eng () FLD	
16. NONCONFORMING CONDITION: Activity Task 2.0, PQCI-R-2,00 states in part that B & W Equipment can not be released for storage until either a Certificate of Conformance, Code Data Report, or Release TWX is received. Contrary to this requirement, the described transmitter was removed from Class A Storage and taken to its present location without either required documentation or quality control release. "Q" list number is 5,0118. Hold pending engineering disposition. 1 hold tag applied.				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
				PROJECT FIELD ENGINEER <i>G. Tucker</i> 1-28-80		DATE	
				PROJECT ENGINEER <i>[Signature]</i> 1-28-80		DATE	
				PROJ CONSTR Q ENGINEER <i>[Signature]</i>		DATE	
				AUTHORIZED INSPECTOR		DATE	
17. REPORTED BY <i>R. Valentin</i>		DATE 3-29-79		18. VALIDATED BY <i>[Signature]</i>		DATE 3-30-79	
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)							
22. (X) Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering							
<i>Refer to Bq60 FOR RESOLUTION</i>							
<i>G. Tucker 1-28-80</i>							
23. PROJECT ENGINEERING DISPOSITION							
25. DISPOSITION RESULTS							
Transmitter 2FT-1102A has been returned to Class A Storage in Whse. 1 and the P.A. Data Package has been received and accepted.							
<i>McDelaney 7/17/80</i>							
26. QC ACCEPTANCE <i>McDelaney</i> 7/17/80							
QC ENGINEER DATE							
AUTHORIZED INSPECTOR DATE							

4-7-80
 4-5-79
 1-28-80
 for concurrence
 See pg. 4

Copley, Ohio 44321

Telephone: 216-366-8841

RECEIVED

May 27, 1980

MAY 29 1980

**BECHTEL POWER CORP.
JOB 7220**

PER 737(F) 20-1

Bechtel Power Corporation
P. O. Box 2167
Midland, Michigan 48640

SUBJECT: Bechtel NCR #2019

Attention: L. E. Davis

Dear Mr. Davis:

In keeping with your January 31, 1980 letter, requesting Bechtel NCR's be closed in a timely manner, I am submitting the subject NCR to your attention for closure. You will notice on my disposition that documentation was received by Mr. Barclay shortly after March 26, 1979 and is contained in the Bechtel vault.

I hope this is sufficient information to close the subject NCR. If you have any questions, please call me on extension #576.

Very truly yours,

H. A. Guetling
H. A. Guetling,
B&W Site Consultant

HAG/dbc
Attachment

cc: W. L. Barclay
W. J. Lee, w/
File, w/a

JOB 7220	INT	EXT
ROUTING		
Site Rep.		
Prin. Sup.		
Serv. Sup.		
S.F. Cont.		
APP. Eng. 1		
APP. Eng. 2		
SU. Trencher		
Cont. Eng.		
Int. Sup.		
Civ. Eng.		
Mech. Sup.		
Mech. Eng.		
Fltr. Sup.		
Fltr. Eng.		
Weld. Eng.		
C. P. A.		
N.C.		
Purch.		
Sub. Con.		
Doc. Con.		

page 2 of 4
NCR - 2019
for



ALC-9205

Start Up System: 2BCA

page 2092
NCR-2019

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19- NO. 2018-9	20. PAGE 1 OF 1	
2. UNIT(S) 2	3. DRAWING/PART NO. 2DH-PT2A/2FT-1102A	REV	4. ITEM DESCRIPTION 1 Differential Pressure Transmitter	5. ITEM LOCATION Class A Storage K-9 Approx. "H" Line @ 6.4		
6. P.O. OR SPEC NO. M 1.35	7. SERIAL NO. See Blk. 16	8. REPLACEMENT PART P/N N/A REV	SER NO.	9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A	
11. INSPECTION CRITERIA () DWG () SPEC (X) OTHER		IR NO. R-2,00-96 NO. PQCI-R-2,00 REV. 4	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By (X) Client () Eng () FL D
16. NONCONFORMING CONDITION: Activity Task 2.0, PQCI-R-2,00 states in part that B & W Equipment can not be released for storage until either a Certificate of Conformance, Code Data Report, or Release TWX is received. Contrary to this requirement, the described transmitter was removed from Class A Storage and taken to its present location without either required documentation or quality control release. "Q" list number is 5,0118. Hold pending engineering disposition. 1 hold tag applied.				24. DISPOSITION CONCURRENCE rework reject repair use as is C. T. Taylor 1-28-80 PROJECT FIELD ENGINEER DATE PROJECT ENGINEER DATE PROJ CONSTR Q. ENGINEER DATE AUTHORIZED INSPECTOR DATE		
17. REPORTED BY R. Valentini	DATE 3-29-79	18. VALIDATED BY C. T. Taylor	DATE 3-30-79	25. DISPOSITION RESULTS		
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)						
22. (X) Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering REFER TO 3410 FOR RESOLUTION C. T. Taylor 1-28-80						
23. PROJECT ENGINEERING DISPOSITION Per inspection, QA Data Package containing required Certificate of Performance was submitted to Mr. W. T. Boudry, Sr. on 1/28/80 Letter 3213 dated March 20, 1979, QA Data Package Document Title No. 23-2850-00 H. A. Greeting B&E Site Consultant 5-27-80						
				26. QC ACCEPTANCE QC ENGINEER DATE AUTHORIZED INSPECTOR DATE		



NON-CONFORMANCE REPORT (CONT'D)

20, PAGE 4 OF 4

19, NCR NO. 2019

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	



1GJA

NONCONFORMANCE REPORT

1. PROJECT NAME MIDLAND		JOB NO. 7220		19. NO. 2198	20. PAGE 1 OF 24	
2. UNIT(S) 1 & 2	3. DRAWING/PART NO. M-657 SH 38	REV 3/FI	4. ITEM DESCRIPTION SPOOL OHBC 88-S-657-38-1	5. ITEM LOCATION AUX. BLDG. cc. c-59 7" E/7.8 11'4" S/G		
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE CONSTRUCTION	10. CONTRACTOR/SUPPLIER N/A	
11. INSPECTION CRITERIA <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. P. 1.10-657-38-4 NO. M-204	12. ASME AUTHORIZED INSPECTION REQ'D <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Rec'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip Furnished By <input type="checkbox"/> Client <input checked="" type="checkbox"/> Eng <input type="checkbox"/> FLD
16. NONCONFORMING CONDITION: SPECIFICATION M-204 REV. 10 SECTION 5.2.6 STATES IN PART "MINIMUM WALL THICKNESS FOR FABRICATED ASSEMBLIES AS FINALLY FABRICATED SHALL BE AT LEAST 0.87 1/2% OF THE NOMINAL WALL THICKNESS FOR PIPE SPECIFIED BY NOMINAL WALL." SPECIFICATION M-481 REV 15 SHEET 22 DESIGNATES 2 1/2" THRU 10" CLASS HBC PIPE AS SCH 40. A MINIMUM WALL THICKNESS VIOLATION EXISTS ON SPOOL OHBC 88-S-657-38-1. THE VIOLATION IS 4" ABOVE FIELD WELD 10				24. DISPOSITION CONCURRENCE rework <input type="checkbox"/> reject <input type="checkbox"/> repair <input checked="" type="checkbox"/> use as is <input type="checkbox"/> J. Gilman / AB 7/2/79 PROJECT FIELD ENGINEER DATE R. Baumbach / CC 6-28-79 PROJECT ENGINEER DATE A. Oberley / AS 7/6/79 PROJ CONSTR QC ENGINEER DATE H. W. Votaw / 7-12-79 AUTHORIZED INSPECTOR DATE		
17. REPORTED BY Michael K. Allard	DATE May 16, 1979	18. VALIDATED BY P.S. Brooks	DATE 5-18-79	25. DISPOSITION RESULTS SPOOL OHBC 78-S-657-38-1 HAS BEEN REPAIRED IN ACCORDANCE TO SPECIFIC- ATION ED-1 AND MEETS REQUIREMENTS OF M-204- REV 10 FOR MINIMUM WALL THICKNESS; VERIFIED WITH PT REPORT # 9150 AND IS ACCEPTABLE PER P. Fuhrer 2/14/80 BLOCK 23 DISPOSITION, PER CALIF. FM-5003-20(A) Rev 3 Reg 7/6/79 J. Pappas 2-15-80 ACCEPTANCE 2-15-80 J. Pappas QC ENGINEER DATE J. Pappas 2-15-80 AUTHORIZED INSPECTOR DATE J. Pappas 2-15-80		
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)						
22. <input type="checkbox"/> Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering Repair <input checked="" type="checkbox"/> in accordance to specification ED-1. P.S. Brooks 5/28/79						
23. PROJECT ENGINEERING DISPOSITION THE DEFECT MAY BE FAIRED INTO THE SURROUNDING SURFACE WITHOUT REPAIR WELDING, IN ACCORDANCE WITH ED-1 BECAUSE THE REQUIRED WALL THICKNESS FOR THE PIPE IS 0.098", PER CALIF. FM-5003-20(A) Rev 3 Reg 7/6/79 THE AREA IN QUESTION SHOULD BE EXAMINED IN ACCORDANCE WITH ED-1 TO VERIFY THAT THE DEFECT IS NO MORE EXTENSIVE THAN FIRST INDICATED. (PER R. PAPPS 6/5/79 AND T. BALLWEG 6/22/79 OF PROT. ENG). A. Krauss						

Block 25 cont. on 1982-7-1-80

Block 16 CONTINUED.

AT THE 270° POSITION ON THE PIPE, THE SIZE OF THE VIOLATION IS $\frac{3}{8}$ " X $\frac{7}{16}$ " X 0.050" DEEP. THE DEPTH WAS MEASURED BY PIT GAGE BPC-M209. THE GAGE WAS CALIBRATED 3-15-79 AND IS DUE FOR CALIBRATION 9-15-79. NOMINAL WALL THICKNESS FOR 3" HBC SCH. 40 PIPE IS 0.216"; 87½% OF 0.216" IS 0.189" AND 0.216" MINUS 0.050" IS 0.166". Q LIST NUMBER 4.572
ONE QC HOLD TAG APPLIED.

Block 25 CONTINUED: NDE REPORT # 10991 VERIFIES THAT THE DEFECT IS NO MORE EXTENSIVE THAN FIRST INDICATED. SEE ATTACHED NDE REPORT.

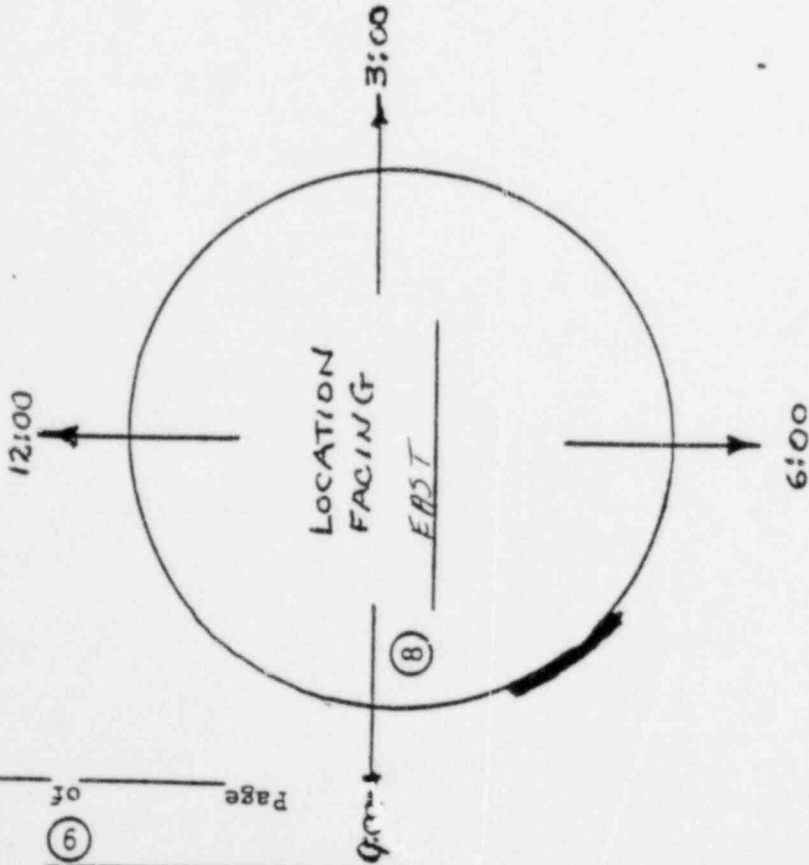
J.R. Fugate
7-7-80

RECORD OF LOCATION FOR TEMPORARY ATTACHMENTS AND BASE METAL REPAIR

① QCIR # _____ ② Log # _____

③ Weld Procedure _____ ④ Repair Procedure _____

⑤ NDE Requirements _____



FIELD No.	187	177	182	202
WELD No. 10	198	200	211	
	206	208	212	

REMARKS:

REPORT # 10991

PAGE 2 OF 2

7-2-80

QCE: *S. C. Fugate* DATE: 7-2-80
 NCR 2198



NONCONFORMANCE REPORT

50 2-EAC

1. PROJECT NAME INDLAND		JOB NO. 7220		19. NO. 2374	20. PAGE 1 OF 2			
2. UNIT(S) 2	3. DRAWING/PART NO. M619-SH-17	REV 3/13	4. ITEM DESCRIPTION FIELD WELDS # 10, 11, 12, 13, 15	5. ITEM LOCATION CONT. # 2				
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE CONSTRUCTION	10. CONTRACTOR/SUPPLIER N/A				
11. INSPECTION CRITERIA () DWG (X) SPEC () OTHER		IR NO. M619-17 (10, 11, 12, 13, 15) NO. G-27-WQ1-1.3	12. ASME AUTHORIZED INSPECTION RECD (X) YES () NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client (X) Eng () FLD		
16. NONCONFORMING CONDITION: G-27-WQ1-1.3 STATES IN PART: WELDERS FOR WELDING OPERATORS SATISFACTORILY PASSING THE APPLICABLE TEST DESCRIBED IN THIS SPEC. WILL BE QUALIFIED TO WELD ON COMPONENTS WHICH ARE GOVERNED BY ANY CODE OR SPEC. THAT REFERENCES SECT. IX OF THE ASME BOILER & PRESSURE CODE. CONTRARY TO THE ABOVE: FIELD WELDS INCLUDING # 10, 11, 12, 13, 15 ON DWG. M-619-SH-17 WERE WELDED BY WELDER # P-742 BY PROCEDURE P1-AT-LH REV. 1. AT THE TIME WELDS WERE DONE. SEE CONT. SHEET FOR CONTINUATION OF BLOCK # 16				24. DISPOSITION CONCURRENCE				
17. REPORTED BY <i>[Signature]</i> 7-19-77				rework		reject	repair	use as is
				PROJECT FIELD ENGINEER <i>[Signature]</i> 8-16-79		PROJECT ENGINEER <i>[Signature]</i> 8-16-79		PROJECT ENGINEER <i>[Signature]</i> 8-20-79
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)				25. DISPOSITION RESULTS For Disposition results, see page 3.				
22. () Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering Field Engineering requests Project Engineering concurrence welder P-742 has satisfactorily passed the required XXXX tests using Bechtel welding Procedure P1-AT-Lh. Field weld 106 on spool 2ELB-10-632-1-9 was radiographed and acceptable. Ref. NCR 2349: Recommendation "USE AS IS". <i>P.S. Brooks</i> 8-2-79				<i>[Signature]</i> 7/22/80				
23. PROJECT ENGINEERING DISPOSITION PROJECT ENGINEERING RECOMMENDS THAT THE FIELD RADIOGRAPH THE FIRST OF THESE WELDS DONE BY P-742. IF IT IS ACCEPTABLE, THAT IS SUFFICIENT PROOF FOR ALL FIVE WELDS. IF IT IS NOT ACCEPTABLE, IT SHALL BE REWELDED AND THE OTHER FOUR WELDS SHALL BE RADIOGRAPHED AS WELL, AND ANY WELDS FOUND UNACCEPTABLE SHALL (CONT P. 2)				26. OC ACCEPTANCE <i>[Signature]</i> 7/22/80 OC ENGINEER <i>[Signature]</i> 7/22/80 AUTHOR. ZED INSPECTOR DATE				

CONTINUATION OF BLOCK # 16

P-7A2 WAS CERTIFIED ONLY ON P1-T REV. 2

Q LIST # 4.192

ONE HOLD TAG APPLIED TO EACH WELD

BLOCK # 23 (CON'T) BE REWELDED. (PER F. MAZEIKO AND T. BALLUES OF PROJECT ENGINEERING, 8/15/79).

A. Kyzym
8/10/79



NONCONFORMANCE REPORT

is s/p # 100 Testable Unit

1. PROJECT NAME MILANO		JOB NO. 7220		19. NO. 2432	20. PAGE 1 OF 1
2. UNITS 2	3. DRAWING/PART NO. E-540	REV 12	4. ITEM DESCRIPTION Control Panel 2C11	5. ITEM LOCATION 659 Avx Bldg.	
6. P.O. OR SPEC NO. J201 Rev. 6	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE Const.	10. CONTRACTOR/SUPPLIER N/A	
11. INSPECTION CRITERIA () DWG () SPEC () OTHER IR NO E6.0-55 NO J201 Rev. 6	12. ASME AUTHORIZED INSPECTION REQ'D () YES () NO	13. SKETCH ATTACHED () YES () NO	14. Discovered During () Rec'g () Const () Test	15. Equip Furnished By () Client () Eng () FL D	
16. NONCONFORMING CONDITION: IN Panel 2C11 E6.0-55 the incoming Green and Black channel CABLE IS not meeting separation criteria as required By J201 Para. 7.8.9. The CABLE IS within 6 inches of internal red channel wires. The CABLE IS entering the top of Panel through penetrations 2B5065 and 2B5075					
24. DISPOSITION CONCURRENCE					
REWORK	reject	repair	use as is		
PROJECT FIELD ENGINEER D. Young DATE 10/16/79					
PROJECT ENGINEER D. Young DATE 10-22-79					
PROJ CONSTR QC ENGINEER					
AUTHORIZED INSPECTOR					
25. DISPOSITION RESULTS BARRIER IS INSTALLED					
17. REPORTED BY George Young DATE 8-8-79					
18. VALIDATED BY D. Young DATE 8-10-79					
21. ROUTING TO FIELD ENGINEERING () TO OTHERS (SPECIFY)					
22. Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering Install a metal barrier between internal red channel wires and incoming cable.					
23. PROJECT ENGINEERING DISPOSITION D. Clayton 10/17/79					
26. DISAPPEARANCE D. Clayton DATE 11/3/80					
AUTHORIZED INSPECTOR					
DATE					

W



NONCONFORMANCE REPORT

9/4: ALL S/u SYSTEMS USING M-140 VALVES

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 2659	20. PAGE 1 OF 2		
2. UNIT(S) 1 & 2	3. DRAWING/PART NO. N/A	REV	4. ITEM DESCRIPTION Nuclear Service Pressure Relief Valves	5. ITEM LOCATION N/A			
6. P.O. OR SPEC. NO. M-140-AC	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV	SER NO.	9. SOURCE Supplier	10. CONTRACT /SUPPLIER Crosby Valve & Gage Company		
11. INSPECTION CRITERIA () DWG () SPEC () OTHER		IR NO. N/A Q158 Rev. 9	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client (X) Eng () FLD	
16. NONCONFORMING CONDITION: The status of the "Q" material on this purchase order has been identified to be indeterminate in regards to satisfactory completion of the qualification test report. "Q" list number varies. No hold tag(s) applied. (Reference: QAR-SD-267)				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
				J. J. [Signature] 5/20/80 PROJECT FIELD ENGINEER DATE E. [Signature] for L. K. [Signature] 5-14-80 PROJECT ENGINEER DATE [Signature] 5/21/80 PROJ CONSTR QC ENGINEER DATE AUTHORIZED INSPECTOR DATE			
17. REPORTED BY Dean A. Delaney		DATE 10/24/79		18. VALIDATED BY [Signature]		DATE 10-26-79	
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)							
22. () Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering Project Engineering to evaluate. D. Short 11/8/79							
23. PROJECT ENGINEERING DISPOSITION Testing the ethylene proplene (EPT) material of the 0-rings on valves procured under P.O. 7220-M-140-AC and 7220-M-333-AC to prove that the material will withstand the specified 40-year integrated radiation dose of 3.0×10^7 rads inside the containment and 1.0×10^7 rads outside the containment. It is no longer required since the vendor recommended that the 0-rings on these valves be replaced during scheduled maintenance periods not to exceed 5 years in accordance with the ASME Code Section XI. Table 3.11-4 of the FSAR will be revised accordingly. All documentation required for both seismic and environmental qual-							
				26. ACCEPTANCE [Signature] 7/21/80 QC ENGINEER DATE AUTHORIZED INSPECTOR DATE			

5/15/80

(P)

Block 23 Continued.

ification of the equipment is submitted and approved. No open qualification items for this equipment exist. Reference QTSR, Rev 11

CS St. Johnson 3/10/80
DATE

PQE V.J. Manta 5/7/80 (rec'd 5/6/80)
DATE

PE W. Hayes for L. Harris 5-14-80
DATE

3

3

3



NONCONFORMANCE REPORT

Spec Codes:

142 BMA	142 BGO
142 ALA	142 BGG
142 BGA	2 GJA
142 BGC	0 GLH

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 2664	20. PAGE 1 OP 1	
2. UNIT(S) 1 & 2	3. DRAWING/PART NO. N/A	REV	4. ITEM DESCRIPTION Nuclear Service Control Valves	5. ITEM LOCATION N/A		
6. P.O. NO. J-255-BC	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV SER NO.		9. SOURCE Supplier	10. MANUFACTURER /SUPPLIER Control Componets, Inc.	
11. INSPECTION CRITERIA () DWG () SPEC (X) OTHER		IR NO. N/A NO. QISR Rev. 9	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client (X) Eng () FLD
16. NONCONFORMING CONDITION: The status of the "Q" material on this purchase order has been identified to be indeterminate in regards to satisfactory completion of the qualification test report. "Q" list number is 5.022. No hold tag(s) applied. (Reference: QAR-SD-267)				24. DISPOSITION CONCURRENCE rework reject repair use as is X W. J. Delaney 3-26-80 PROJECT FIELD ENGINEER DATE L. R. Graden 3-21-80 PROJECT ENGINEER DATE W. J. Delaney 4-7-80 PROJ CONST QC ENGINEER DATE AUTHORIZED INSPECTOR DATE		
17. REPORTED BY Dean A. Delaney		DATE 10/24/79	18. VALIDATED BY W. J. Delaney	DATE 10-26-79	25. DISPOSITION RESULTS	
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)						
22. () Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering Recommend disposition by Project Engineering. V R Graden 11-6-79						
23. PROJECT ENGINEERING DISPOSITION Environmental test reports are required only for Q-functional (active) valves. None of the 4 Q _F valves on this order have been shipped and therefore the test reports (which are normally shipped with the valve) are not at present required to be on the site. Since the qualification test reports (described above as being the "nonconforming condition") are neither deficient nor nonconforming, the status of the "Q" material on this order is satisfactory "as is". CWN 2/27/80 DW MB 3/14/80						
26. QC ACCEPTANCE W. J. Delaney				DATE 7/21/80		
QC ENGINEER				DATE		
AUTHORIZED INSPECTOR				DATE		



NONCONFORMANCE REPORT

1. Project Name MIDLAND		Job No. 7220		19. No. 2785	20. Page 1 of 3								
2. Unit(s) 2	3. Drawing/Part No. E-532	Rev 14	4. Item Description FUSIBLE SWITCH 2013	5. Item Location 6014' AUX BLDG.									
6. P.O. Or Spec No. N/A	7. Serial No. N/A	8. Replacement Part P/N N/A REV NA	SER NO. NA	9. Source CONST.	10. Contractor/Supplier N/A								
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. C150-EH 202	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> REC:G <input checked="" type="checkbox"/> CONST <input type="checkbox"/> TEST								
16. Nonconforming Condition: REQUIREMENTS: (A) SPECIFICATION C-305, TABLE 4.1 REQUIRES THAT 1/2" EXPANSION ANCHORS HAVE A MINIMUM EMBEDMENT OF 2 1/4". (B) THERE IS NO APPROVED DETAIL FOR THE USE OF WASHERS AS SHIMS DURING THE INSTALLATION OF ELECTRICAL EQUIPMENT.		15. Equip Furnished By		24. Disposition Concurrence									
CONDITIONS: DURING THE INSTALLATION OF FUSIBLE SWITCH 2013 (4) 1/2" EXPANSION ANCHORS WERE USED. THREE OF THE FOUR ANCHORS		(CONT ON PAGE 2)		<table border="1"> <tr> <td>REWORK</td> <td>REJECT</td> <td>REPAIR</td> <td>USE AS IS</td> </tr> <tr> <td><input checked="" type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> <td><input type="checkbox"/></td> </tr> </table>		REWORK	REJECT	REPAIR	USE AS IS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
REWORK	REJECT	REPAIR	USE AS IS										
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>										
17. Reported By George G...	Date 12-4-79	18. Validated By Baralay	Date 12-7-79	25. Disposition Results									
21. Routing <input checked="" type="checkbox"/> FIELD ENGINEERING	22. <input type="checkbox"/> Field Engineering <input checked="" type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING		Grouting of 5/8" Anchor Bolts is complete. Refer to IR-C1-10-862.										
23. Project Engineering Disposition PROJECT ENGINEERING CONCURS WITH DISPOSITION TO REWORK BY INSTALLING "GROUTED IN" ANCHORS AFTER CHARGING CYCLE IS COMPLETE. The grouted anchor size shall be 5/8".			ONE EXP STUD 1/2" ANCHOR AND 3 5/8" GROUTED ANCHOR INSTALLED. REFER TO E-L.O-121 REV 1										
George G... 6/24/80			Baralay 7-9-80										
George G... 6/24/80			Baralay 7/9/80										

1/28 6-24

6/24/80

E

7/28

6/28 7/9/80





(BLOCK 16 CON'T)

fail to MEET the MINIMUM EMBEDMENT LENGTH (see sketch). THESE ARE Hilti ANCHORS MARKED WITH AN "I", MAKING THEM $5\frac{1}{2}$ " LONG. IN ADDITION the same three ANCHORS ARE USING WASHERS AS SHIMS. (CONT ON PAGE 3)

Q-LIST 1.202

1 Hold TAG

HOLD FOR ENG. DISPOSITION

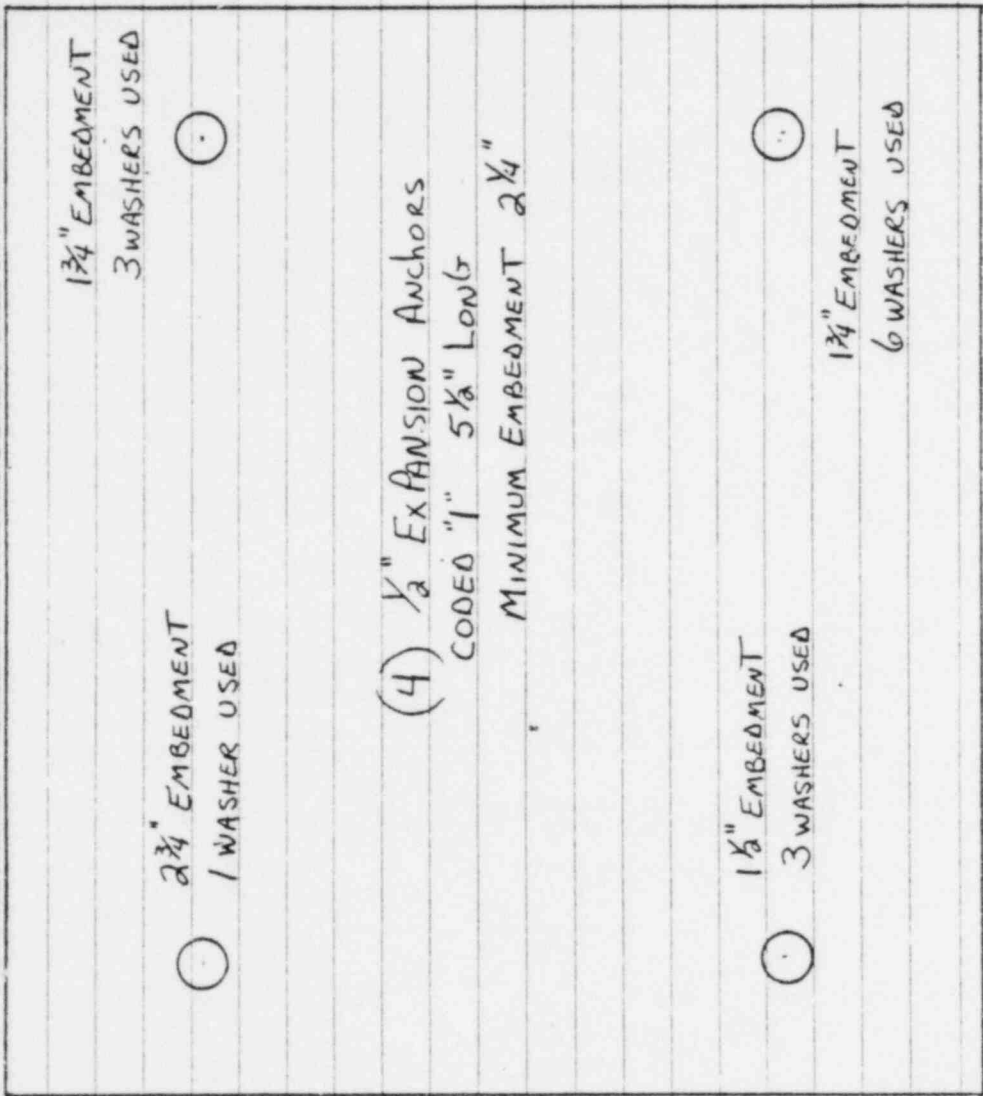
Blk. 22 cont.)

intention to determine cables from 2013, pull them out to permit removal of 2013 cabinet and thus make proper installations of grouted anchors to replace the out of spec. hilti expansion anchors.

W.B. Hayes 1-7-80



48840



FRONT OF PANEL 2013

DATE

TIME

TESTER



NONCONFORMANCE REPORT (CONT'D)

20. PAGE 4 OF 4

19. NCR NO. 2785-98-2405

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
<i>Boos</i>			
PROJECT FIELD ENGINEER			DATE 6-25-80
<i>P. ...</i>			DATE 6/25/80
PROJECT ENGINEER			DATE 6/25/80
<i>...</i>			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE



Elect

NONCONFORMANCE REPORT

S/U NON TESTABLE UNIT

6 AWS
8 25
5 24-80
4 23-80
4-23-80

D.G.
Rec'd
2/8

1. PROJECT NAME MIDLAND		JOB NO. 7220		19. NO. 2864	20. PAGE 1 OF 3	
2. UNIT(S) I	3. DRAWING/PART NO. E-644 SH.1	REV 4	4. ITEM DESCRIPTION CABLE TRAY SUPPORT	5. ITEM LOCATION AUX. 659'13"3"5. OF J 49"E OF 5.3		
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A	9. SOURCE CONST.	10. CONTRACTOR/SUPPLIER N/A		
11. INSPECTION CRITERIA () DWG () SPEC (X) OTHER		IR NO. 18FF07 NO. FCR-E-1514	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client () Eng (X) FLD
16. NONCONFORMING CONDITION: Requirement: E-644 SH.1 DCN #15 REFERENCES FCR-E-1514 FOR THE CONFIGURATION OF SUPPORT #E-644-18 (Q.C. ROLL OUT). THE FOLLOWING ITEMS ARE IN VIOLATION OF FCR-E-1514 OR DCN. #15 ① Requirement: Detail "B" STATES, "7/8" φ HOLES IN PL FOR 3/4" φ H.D.I ANCHOR BOLTS. MIN. EMBED 3 1/4" TYP." CONDITION: FIELD HAS INSTALLED 3/4" φ STUD ANCHORS.				24. DISPOSITION CONCURRENCE rework reject repair use as is #4 #2,3,5,6 W. Miller 3-24-80 PROJECT FIELD ENGINEER DATE Plasma for L. Ginter 3/21/80 PROJECT ENGINEER DATE W. Miller 3-25-80 PROJ CONSTR QC ENGINEER DATE AUTHORIZED INSPECTOR DATE		
17. REPORTED BY S. J. Minishi	DATE 1-23-80	18. VALIDATED BY W. Miller	DATE 1-23-80	25. DISPOSITION RESULTS 1 Hold Tag removed Dwg E-644 Sh.1 Rev G has been changed with DCN. #16- E-644-2314. Remaining Items comply with project disposition. H. Peterson 7-14-80		
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)		22. () Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering Use as is. For item 5, FCN 1898 was written. A.S. Hagan 2-5-80 Redisposition item 1) Use as is. Minimum embed for 3/4" φ stud anchors installed are top North-3 1/4, bottom North-2 1/4, top South-3 3/4, bottom South-2 3/4. (Reference UT report 10147). J. J. Miller 4/23/80.				
23. PROJECT ENGINEERING DISPOSITION Project Engineering has reviewed the nonconforming conditions and has determined the following: (C/E) Item 1 ^{5 AWS} Unmarked/uncoded expansion anchors installed after issue date of SCN 9002. See page #3 Spec 7220-C-305(Q) shall be ultrasonically tested to verify embedment length, and reworked if necessary to meet requirements of Spec 7220-C-305(Q). Item 2 - Installed tray elevation is dependent on support and other interfering items. A change in elevation of 5" is satisfactory, therefore "Use-As-Is". * Items 2, 3, 4, Require DWG E644 Sh. 1 to be changed. See page 3						
26. QC ACCEPTANCE QC ENGINEER W. Miller 7-14-80 AUTHORIZED INSPECTOR DATE						

C/E

E 4-24-80
S 11-80

E/C
5-16-80
J

See page for
concordance
to addition

NONCONFORMANCE REPORT (CONT'D)
(Cont. Block #16)

EMBEDMENT IS INDETERMINATE AS ANCHORS ARE UNCODED.

- ② REQUIREMENT: DCN #15 SHOWS TRAY SECTION (2BFF07) TO BE INSTALLED @ EL. 667'-3".
CONDITION: TRAY IS INSTALLED @ EL. 666'-10" 18FF07 42M 1-23-80
- ③ REQUIREMENT: FCR-E-1514 SHOWS VERT. LS. MEMBER TO BE INSTALLED @ 3'-6" EAST OF THE FACE OF 5:3 WALL.
CONDITION: FIELD HAS INSTALLED LS. MEMBER @ 3'-3" EAST OF THE FACE OF 5:3 WALL.
- ④ CONDITION: FCR-E-1514 DETAIL "A" DOES NOT GIVE A WELD DETAIL FOR THE ANGLE CLIP ATTACHMENT TO THE WEB OF THE BEAM.
- ⑤ CONDITION: TRAY 2BFF07 IS ATTACHED TO THE UNDERSIDE OF HORIZ. LS. MEMBER (LS. 3"x3"x.25). NO PROJECT APPROVED ATTACHMENT DETAIL CAN BE LOCATED FOR THIS CONFIGURATION.
- ⑥ REQUIREMENT: FCR-E-1514 STATES "SUPPORT-MAX. LOAD IS 333.0 LBS."
CONDITION: SUPPORT NOW HAS A LOAD OF 406.25 LBS.

Q. LIST # 3.005 ONE Q.C. HOLD TAG APPLIED
Hold For Engineering Disposition

F/E PETE WILLEN NOTIFIED 1-22-80



Block 23 continued - -

Item 3 - The change in location of the vertical tube steel is such ^{THAT} ~~XXXX~~ the support remains within the original design limitations therefore "Use-As-Is".

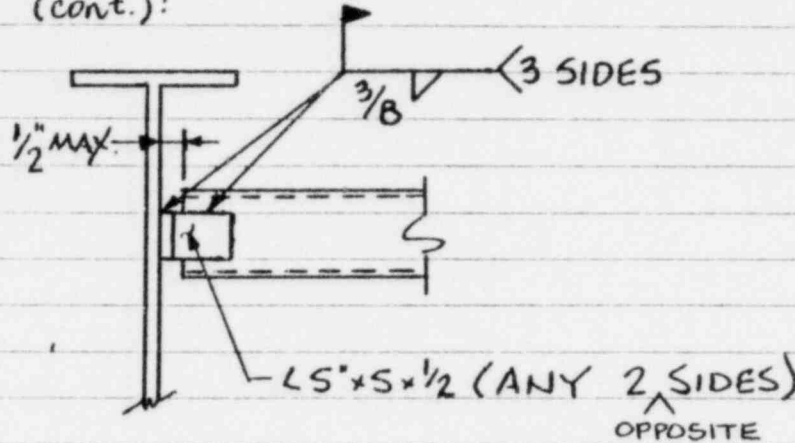
Item 4 - The omitted weld detail shall be as per sketch on Page 3.

Item 5 - The tray attachment to the support is specified by FCN E-1898, therefore "Use-As-Is".

Item 6 - The additional load on the support is such that the support is still within the original design limitations, therefore "Use-As-Is".

J.M. Spiffitt 3/18/80
BES
RS

ITEM 4 (cont.):



DET. (A)
N.T.S.

~~Redisposition Item 1: Project Engineering has reviewed the nonconforming condition and has determined that all four anchor bolts are required to adequately support the shear loads involved, therefore, the bottom two anchor bolts shall be reworked to meet the minimum embedment required by Spec. 7210-C-305(Q).~~

SEE PAGE #5 AHS

REM C-2685
CALC. # 29C

J.M. Spiffitt (4/29/80)
BES 4/30/80 RS



NONCONFORMANCE REPORT (CONT'D)

20. PAGE 4 OF 4
SAHS 23
5-16-80
98
23-80
19. NCR NO. 2864

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

Handwritten: 5-5-80
5/2/80
3/9/80

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

Handwritten: ITEM #1
6-4-80
6/4/80
6/6/80

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

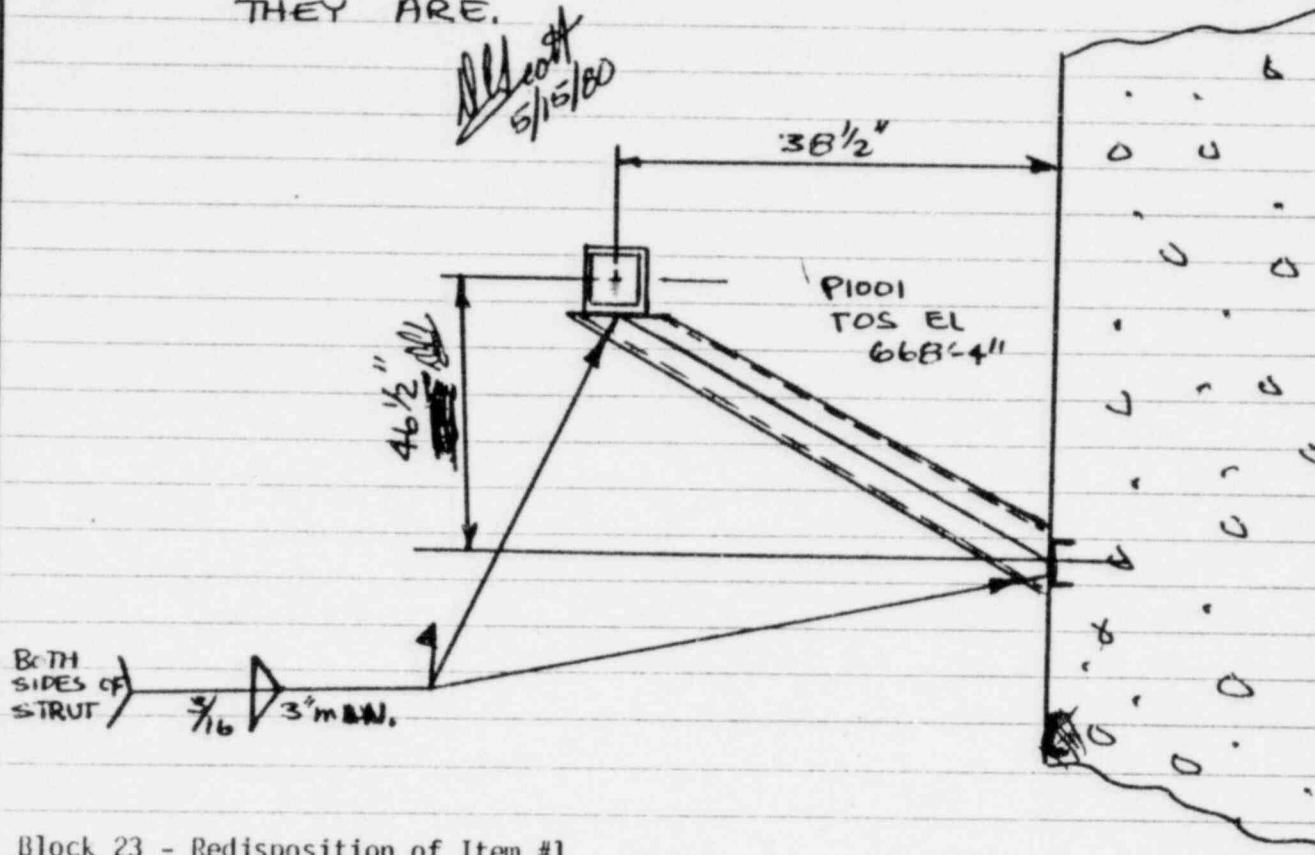
24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	



BLOCK 22) REDISPOSITION ITEM 1, THE BOTTOM TWO ~~ANCH~~ ANCHORS CAN NOT BE REMOVED. AFTER DISCUSSING THE PROBLEM WITH A RESIDENT CIVIL ENGINEER IT WAS DETERMINED THAT A POSSIBLE ALTERNATIVE WOULD BE TO ADD A HORIZONTAL BRACE AS SHOWN BELOW AND LEAVE THE TWO BOTTOM ANCHORS AS THEY ARE.



Block 23 - Redisposition of Item #1

Project Engineering has reviewed the Field Engineering Redisposition of Item 1 and has determined that the addition of the brace will allow two anchor bolts to adequately support the shear loads involved, therefore, the non-conforming condition shall be repaired in accordance with sketch on page 6 of NCR. REM C-2722

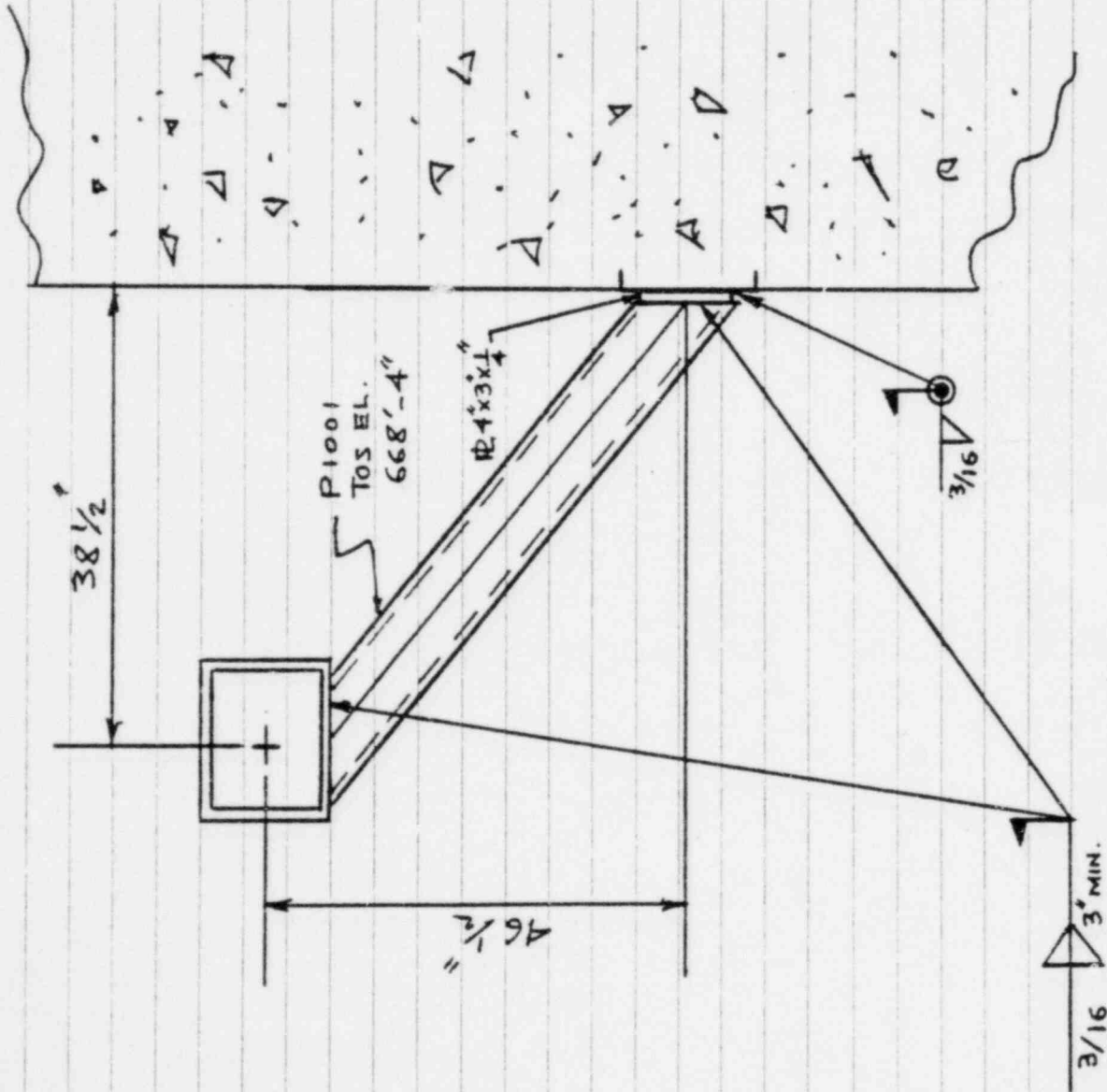
RCALC # 29C

Drawing E644(0) Sh. 1 will be revised.

5-30-80
6/2/80
RS



Blk 23 (CONT.)





Chief

F.E. CONTACT - J. BETTS.

NONCONFORMANCE REPORT

S/U - NON TESTABLE

YUAN

19 NO. 2913 PAGE 1 OF 1

5. ITEM LOCATION
SEE BLK. 16

9. SOURCE
CONSTRUCTION

4. ITEM DESCRIPTION
TORQUE WRENCH UNCALIBRATED

8. REPLACEMENT PART
P/N N/A REV N/A SER NO. N/A

3. DRAWING/PART NO.
MIDLAND 07220

14. Disc'd During () Rec'd () Test

15. Equip Furnished By () Client () Eng () FLD

10. CONTRACTOR/SUPPLIER
N/A

12. ASME AUTHORIZED INSPECTION RECD () YES () NO

13. SKETCH ATTACHED () YES () NO

11. INSPECTION CRITERIA () DWG () SPEC () OTHER

24. DISPOSITION CONCURR/CE

rework reject repair use as is

PROJECT FIELD ENGINEER
3/4/80

PROJ CONSTR CO ENGINEER
3-9-80

AUTHORIZED INSPECTOR
DATE 4-15-80

25. DISPOSITION RESULTS

see pg. 4 for concurrence

Initial random sample of 60 Bolts torque tested & found to be acceptable See page 7 & 8

INITIAL (L.HOSKINS)

7/20/80

DATE 7/20/80

AUTHORIZED INSPECTOR DATE

17. REPORTED BY DATE

2-26-80

18. VALIDATED BY DATE

2-26-80

21. ROUTING: () TO FIELD ENGINEERING () TO OTHERS (SPECIFY)

22. (X) Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering

BOLTS IN THE AREAS MENTIONED IN BLOCK #16 SHALL BE REINSPECTED PER SPECIFICATION C-304, SECTION 9.0, USING A TORQUE WRENCH THAT IS IN CALIBRATION.

(see revised disp. on page 3)

PROJECT ENGINEERING DISPOSITION

A RANDOM SAMPLE OF 60 BOLTS SHALL BE TESTED TO DETERMINE THE ACCEPTABILITY OF EXISTING BOLT TORQUE. THESE TESTS WILL DEMONSTRATE, WITH A CONFIDENCE LEVEL OF 95%, THAT NOT MORE THAN 5% OF THE BOLTS (TORQUE) ARE UNACCEPTABLE. THE ATTACHED SEQUENTIAL SAMPLING PROGRAM (TABLE) SHALL BE FOLLOWED IF SOME BOLTS (TORQUES) ARE UNACCEPTABLE IN THE SAMPLE. THE RANDOM SELECTION

CONT. SEE PAGE 5

DATE 7/20/80

NCR-2913
4875
7/2

BECHTEL POWER CORPORATION
Calibration Certification

Job 7220

Preparation Date 2-11-80

Torque Wrench MANUFACTURER SNAP-ON
S/N BPC C2066 MANUFACTURER S/N 1058
CAL./CERT. AGENCY BCL MODEL NUMBER TF 803FU

CALIBRATION PROCEDURE USED: FIG 6.120RWO REQUIRED ACCURACY: ± 32 ft/lb
CALIBRATION STANDARD USED: BPC L 5017

CALIBRATION STANDARD (IS) IS NOT TRACEABLE TO NATIONAL BUREAU OF STANDARDS FOR ACCURACY
CERTIFICATION. NOTE: IF CALIBRATION STANDARD IS NOT TRACEABLE TO NBS, JUSTIFY IN
ADDITIONAL SECTION.

Standard Value	BEFORE CAL.		AFTER CAL.			Remarks
	CW Inc.	CCW Dec.	Inc.	Dec.	Other	
110	175	180				
320	340	325				
480	435	500				
640	435	680				
775	—	800				

STRENGTH MADE: Yes No

STRENGTH BEFORE CAL. Will not go above 435^{ft}/_{lb} CW AFTER CAL. NA

STRENGTH MEETS REQUIREMENTS FOR ACCURACY: Yes No

STRENGTH RANGE 0 → 800^{ft}/_{lb}

Torque Wrench will not go above 435^{ft}/_{lb}
otherwise, will be sent to factory for
repair.

DATE L. Conchi

DATE 2-11-80

APR 8 4 15 80

NONCONFORMANCE REPORT (CONT'D)

Block 22:

THE TORQUE WRENCH BPC C2066 WAS FOUND TO BE OUT OF TOLERANCE WHEN IT WOULD NOT READ OVER 435 ft-lbs. ALL BOLTS IN BLOCK 16 WERE CHECKED PREVIOUS TO THE NON CONFORMING CONDITION & WERE FOUND ACCEPTABLE AT OVER 520 ft-lbs.

THE FIELD RECOMMENDS TO CHECK AT RANDOM 125 OF THE APPROXIMATELY 2850 BOLTS IDENTIFIED IN BLOCK #16, THE FIELD SHALL INSPECT A MAXIMUM OF TWO BOLTS IN ANY ONE CONNECTION USING A TORQUE WRENCH THAT IS IN CALIBRATION

THE SAMPLE AMOUNT (125) WAS TAKEN FROM "MILITARY STANDARDS SAMPLING PROCEDURES & TABLES FOR INSPECTION BY ATTRIBUTES" (MIL-STD-105D APRIL 29, 1963). USING THE ~~NORMAL~~ ~~DEFECTIVE~~ SINGLE SAMPLING PLAN FOR NORMAL INSPECTION AN ACCEPTABLE QUALITY LEVEL (MAXIMUM PERCENT DEFECTIVE) OF 10 CAN BE REACHED WITH A MAXIMUM OF 3 REJECTABLE BOLTS FOR THE 125 SAMPLE AMOUNT. IF THE ACCEPTABLE QUALITY IS SATISFIED (MAX. 3 REJECTABLE BOLTS) THE BOLTS SHALL BE USED AS IS.

[Signature] 4/15/80
Paul C. Newberry 4/15/80



NONCONFORMANCE REPORT (CONT'D)

20. PAGE 4 OF 8 NO 7122124 W 444 98-4-15-80 19. NCR NO 2913

SEG BLOCKS 22 & 23 OF THE NCR M.E. 5/21/80

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
X	X	X	X
<i>Al Bvor</i>		5.30.80	
PROJECT FIELD ENGINEER		DATE	
<i>M. S. For LHCURT</i>		5/15/80	
PROJECT ENGINEER		DATE	
<i>[Signature]</i>		6/3/80	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

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AUTHORIZED INSPECTOR		DATE	

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AUTHORIZED INSPECTOR		DATE	

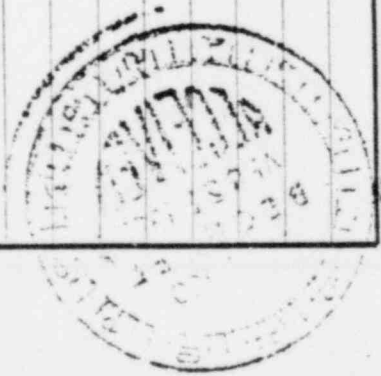


NONCONFORMANCE REPORT (CONT'D)

Block 23 (CONTINUED)

OF BOLTS SHALL BE PERFORMED BY NUMBERING THE BOLTS AND USING
RANDOM NUMBER TABLES FOR ALL BOLTS OF THE IDENTIFIED EQUIP.
AND STRUCTURES IN BLOCK 16. IF THERE ARE DEFECTS IN THE SAMPLE
OF 60, THE SAMPLE SIZE SHALL BE INCREASED UNTIL THE SAMPLE SIZE
CORRESPONDS WITH THE DEFECTS (TABLE 1 pg 6). BOLTS THAT ARE NOT
ACCEPTABLY TORQUED SHAL BE REPLACED IF REQUIRED AND TORQUE OR
RETORQUED TO ACCEPTABLE VALUES.

w. d. g. h. m. 5/11/80 J. J. G. 5/12/80
P. O. W. 5/13/80



Handwritten marks or symbols on the right margin.

NP726



TABLE 1
 SEQUENTIAL SAMPLING PROGRAM

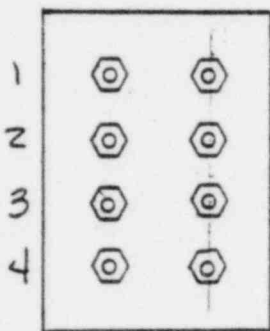
<u>Sample Size</u>	<u>Acceptable Number of Defects in the Sample</u>
60	0
92	1
124	2
152	3
182	4
216	5
245	6
270	7
290	8
315	9
340	10
370	11
390	12
420	13
443	14
465	15
500	16
515	17

RANDOM NUMBER SELECTION

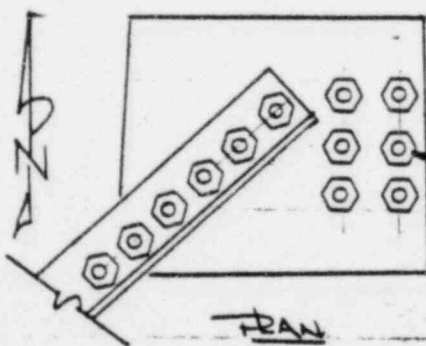
- ① LINE 1 COL. 1, LINE 2 COL. 2 LINE 14 COL 14, LINE 15 COL 1
LINE 1 thru 200
- ② LINE 2 COL. 1, LINE 3 COL. 2 LINE 15 COL 14, LINE 16 COL 1
LINE 2 thru 200
- ③ first, second, third & fifth Digit

BOLT NUMBERING

Bolts to be numbered as follows unless noted otherwise



FACING the nut SIDE (N) or BOLT HEAD SIDE (B) of connection numbering shall be from top to bottom beginning with Top Left Bolt as shown



CONNECTION D110-1 TO A111-1 (Bolts 2255 thru 2266)

BOLT # 2257

BOLT TORQUE CHECK

ALL BOLTS TORQUE CHECKED to or exceeding original torque value recorded

NO	RANDOM BOLT NO.	DATE CHK'D	WRENCH CALIB. DIE	REMARKS	NO	RANDOM BOLT NO.	DATE CHK'D	WRENCH CALIB. DIE	REMARKS
1	1040	7/9/80	2812 8/11/80	(N)	31	1789	7/22/80	2812 8/11/80	(N)
2	2257	7/25/80	2812 8/11/80	SEE SKETCH W/ COVER SHEET	32	0514	7/22/80	2812 8/11/80	(N)
3	0611	7/24/80	2812 8/11/80	(B)	33	1465	7/22/80	2812 8/11/80	(N)
4	2531	6/10/80	2066 10/30/80	(N)	34	1955	7/22/80	2812 8/11/80	(N)
5	1793	7/22/80	2812 8/11/80	(N)	35	0121	6/9/80	2066 10/30/80	(N)
6	0157	6/9/80	2066 10/30/80	(N)	36	0204	7/28/80	2812 8/11/80	(N)
7	0719	7/25/80	2812 8/11/80	(N)	37	0319	7/28/80	2812 8/11/80	From 3 rd Bolt North @ Top Row
8	1215	7/22/80	2812 8/11/80	(N)	38	1213	7/28/80	2812 8/11/80	(N)
9	2326	7/24/80	2812 8/11/80	(N)	39	1674	7/22/80	2812 8/11/80	(N)
10	0661	7/2/80	2812 8/11/80	(N)	40	0125	6/9/80	2066 10/30/80	(N)
11	2634	6/10/80	2066 10/30/80	(N)	41	0383	7/28/80	2812 8/11/80	(B)
12	0536	7/25/80	2812 8/11/80	(B)	42	0251	7/25/80	2812 8/11/80	2 nd Bolt from WEST
13	2648	6/10/80	2066 10/30/80	(N)	43	1574	7/25/80	2812 8/11/80	(N)
14	1898	6/10/80	2066 10/30/80	(N)	44	2821	6/10/80	2066 10/30/80	(N)
15	2820	6/10/80	2066 10/30/80	(N)	45	0739	7/24/80	2812 8/11/80	(N)
16	1809	6/10/80	2066 10/30/80	(N)	46	2122	7/24/80	2812 8/11/80	(B)
17	1545	7/25/80	2812 8/11/80	(N)	47	0762	7/25/80	2812 8/11/80	(N)
18	2555	6/10/80	2066 10/30/80	(N)	48	0978	7/22/80	2812 8/11/80	(N)
19	2013	7/22/80	2812 8/11/80	(N)	49	1883	6/10/80	2066 10/30/80	(N)
20	1483	7/22/80	2812 8/11/80	(N)	50	1199	7/24/80	2812 8/11/80	(N)
21	0646	7/25/80	2812 8/11/80	(N)	51	1372	7/24/80	2812 8/11/80	(N)
22	1255	7/22/80	2812 8/11/80	(N)	52	2696	6/10/80	2066 10/30/80	(N)
23	1743	7/22/80	2812 8/11/80	(N)	53	0244	7/25/80	2812 8/11/80	South Bolt
24	2789	6/10/80	2066 10/30/80	(N)	54	0589	7/25/80	2812 8/11/80	(N)
25	1565	7/25/80	2812 8/11/80	(N)	55	1844	6/10/80	2066 10/30/80	(N)
26	0952	7/22/80	2812 8/11/80	(N)	56	0423	7/25/80	2812 8/11/80	(N)
27	0003	6/9/80	2066 10/30/80	(N)	57	0563	7/22/80	2812 8/11/80	(N)
28	0616	7/24/80	2812 8/11/80	(B)	58	1457	7/22/80	2812 8/11/80	(N)
29	1262	7/22/80	2812 8/11/80	(N)	59	2044	7/22/80	2812 8/11/80	(N)
30	0099	6/9/80	2066 10/30/80	(N)	60	1663	7/22/80	2812 8/11/80	(N)



Civil

MECH

JUAN

NONCONFORMANCE REPORT

S/U # Non-Testable

1. PROJECT NAME MIDLAND		JOB NO. 7220		19. NO. 2959	20. PAGE 1 OF 1								
2. UNIT(S) 1 & 2	3. DRAWING/PART NO. C-439 & C-477	REV 4/10	4. ITEM DESCRIPTION EMBEDDED BOLTS FOR PUMP RETURN LINE RESTRAINTS	5. ITEM LOCATION ELV. 627'-1" & 630'-0"									
6. P.O. OR SPEC NO. F-14780, F-1932, F-16781	7. SERIAL NO. NA	8. REPLACEMENT PART P/N NA REV NA SER NO NA	9. SOURCE CONST.	10. CONTRACTOR/SUPPLIER NA									
11. INSPECTION CRITERIA <input checked="" type="checkbox"/> DWG () SPEC () OTHER		IR NO. NA NO. NA	12. ASME AUTHORIZED INSPECTION REQ'D () YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED () YES <input checked="" type="checkbox"/> NO	14. Discovered During () Rec'g <input checked="" type="checkbox"/> Const () Test	15. Equip Furnished By () Client () Eng <input checked="" type="checkbox"/> FLD							
16. NONCONFORMING CONDITION: THE EMBEDDED BOLTS FOR THE PUMP RETURN LINE RESTRAINTS, AS SHOWN IN SECTS. F, G, & H ON DWG. C-439 AND IN DET. 5 ON DWG. C-477, WERE PROCURED PRIOR TO THE DWG. CHANGE TO THE GENERAL NOTES ON DWG. C-435 WHICH REQUIRED CHARPY TESTING FOR THESE BOLTS. HOWEVER, THE BOLTS WERE INSTALLED AFTER THE CHARPY TEST REQUIREMENT WAS ADDED AND THE BOLTS WERE NOT CHARPY TESTED. Q # 1,102			24. DISPOSITION CONCURRENCE										
<p>HOLD TAGS APPLIED.</p>			<table border="1"> <tr> <th>rework</th> <th>reject</th> <th>repair</th> <th>use as is</th> </tr> <tr> <td></td> <td></td> <td></td> <td><input checked="" type="checkbox"/></td> </tr> </table>			rework	reject	repair	use as is				<input checked="" type="checkbox"/>
rework	reject	repair	use as is										
			<input checked="" type="checkbox"/>										
17. REPORTED BY Steve Hawley	DATE 4-2-80	18. VALIDATED BY B Barclay	DATE 4-4-80	PROJECT FIELD ENGINEER Boon 6-10-80 DATE PROJECT ENGINEER Frederick H. Curtis 6/3/80 DATE PROJECT CONSTRUCTION ENGINEER W. J. Russell 6/14/80 DATE AUTHORIZED INSPECTOR NA W/M 4-7-80 DATE 25. DISPOSITION RESULTS									
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING () TO OTHERS (SPECIFY)													
22. () Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering													
<p>THE FIELD RECOMMENDS A "USE AS IS" DISPOSITION.</p> <p style="text-align: center;">Abetto 4/4/80</p>													
23. PROJECT ENGINEERING DISPOSITION													
<p>PROJ. ENGINEERING CONCURS WITH FIELD'S RECOMMENDATION TO USE AS IS. ANTICIPATED STRESSES FOR THESE BOLTS WERE DETERMINED IN CALC # Q-107 AND COMPARED AGAINST DOCUMENT TEST DATA BY M&QS. M&QS RESPONSE IN LETTER DTP-050-013 INDICATES MATERIAL WILL MEET DESIGN REQUIREMENTS.</p> <p style="text-align: right;">Q. Boyak 5-29-80 5/24/80 P. Shen for B. Dhere 5/31/80</p>													
26. QC ACCEPTANCE QC ENGINEER				DATE 7/3/80									
AUTHORIZED INSPECTOR				DATE									

all to disposition

p. Shen 5/2



NONCONFORMANCE REPORT

S/U CODE: UNTESTIBLE

1. Project Name MIDLAND		Job No. 7220		19. No. 2997	20. Page 1 of 1	
2. Unit(s) 1 & 2	3. Drawing/Part No. N/A	Rev	4. Item Description POST TENSIONING SYS: FIELD BUSHINGS	5. Item Location INSTALLED: UNIT 1 & 2		
6. P.O. Or Spec No. C-2 AC	7. Serial No. N/A	8. Replacement Part SER NO. N/A PIN REV	9. Source SUPPLIER	10. Contractor/Supplier INRYCO.		
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER NO. C-2		IR NO. N/A	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> REC:G <input checked="" type="checkbox"/> CONST <input type="checkbox"/> TEST	15. Equip Furnished By <input type="checkbox"/> CLIENT <input checked="" type="checkbox"/> ENG <input type="checkbox"/> FLD
16. Nonconforming Condition: SPECIFICATION 7220-C-2 REQUIRES DOCUMENTATION IN ACCORDANCE WITH G-321D, CONTRARY TO THE ABOVE: NO DOCUMENTATION PACKAGES FOR (UNIT 2) 3 BUSHINGS HT CODE # MW-27, MW-343 & MW-348 & (UNIT 1) MW 167 HAS BEEN RECEIVED, NOR IS THERE A MRR SHOWING RECEIPT OF THESE BUSHINGS. Q NUMBER IS 1.107 HOLD PENDING ENGINEERING DISPOSITION, NO HOLD TAGS APPLIED			24. Disposition Concurrence REWORK REJECT REPAIR USE AS IS DOG 5-20-80 PROJECT FIELD ENGINEER DATE PROJECT ENGINEER DATE 5/27/80 PROJECT CONSTR QC ENGINEER DATE AUTHORIZED INSPECTOR DATE			
17. Reported By L.M. Morris	Date 5/17/80	18. Validated By L.M. Morris	Date 5/18/80	25. Disposition Results corrected documentation received, reviewed & accepted. 7-1-80		
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		22. <input checked="" type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING MATERIAL PROCUREMENT SUPERVISOR TO OBTAIN THE REQUIRED DOCUMENTATION, L.M. Morris 5/17/80 L.M. Morris 5/19/80				
23. Project Engineering Disposition			26. QC Acceptance L.M. Morris 7-1-80 QC ENGINEER DATE AUTHORIZED INSPECTOR DATE			



Corrected Copy

PERFORMANCE REPORT

S/U Non Testable Unit

Jan 5-80

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 2998	20. PAGE 1 OF 2	
2. UNIT(S) Cont #2	3. DRAWING/PART NO. 7220-E-650 Sh 1	REV 18	4. ITEM DESCRIPTION Violation of Proximity Criteria	5. ITEM LOCATION Cont #2 Az 290 ⁰ Elev 618'		
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV _____ SER NO. _____		9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A	
11. INSPECTION CRITERIA <input checked="" type="checkbox"/> DWG <input type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. 2BVA002 NO. E42Rev44	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Rec'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip Furnished By <input type="checkbox"/> Client <input type="checkbox"/> Eng <input checked="" type="checkbox"/> FLD
16. NONCONFORMING CONDITION: REQUIREMENT: E-42 Rev 44 Sh 11B, Note 28a states "Conduits of different channels, running parallel or perpendicular to each other, should maintain a minimum separation of one (1) inch between the conduits, conduit fittings or conduit bodies." CONDITION: Contrary to the above, 6" conduit 2BVA002 is less than 1" from a Non-Q listed conduit. This installation was the subject of DR E-1921 and addressed to Project Engineering on FCR E-1797. One QC Hold Tag applied, Q#3.005. Hold for Eng. Disposition.				24. DISPOSITION CONCURRENCE rework reject repair use as is <i>Boon</i> 6-25-80 PROJECT FIELD ENGINEER DATE <i>Boon</i> 6/23/80 PROJECT ENGINEER DATE <i>Boon</i> 6/24/80 PROJ CONS'R QC ENGINEER DATE AUTHORIZED INSPECTOR DATE		
17. REPORTED BY <i>JW Miller</i> 5-8-80		18. VALIDATED BY <i>Boon</i> 5/9/80 <i>Boon</i> 5/8/80		25. DISPOSITION RESULTS COMMUNICATION CONDUIT REMOVED & COMMUNICATION CABLE REMOVED. RE-ROUTING COMMUNICATION CONDUIT & RE-PULLING COMMUNICATION CABLE NOT QC INSPECTED ITONS <i>JW Miller</i> 7-3-80		
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		22. <input type="checkbox"/> Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering Field Engineering recommends since the low voltage communication conduit is supported for 20VBR1 criteria and channel spacing can not be met due to conduit embedment and space limitation of 6" conduits; use as is for this case only.				
23. PROJECT ENGINEERING DISPOSITION		<i>B. Mattheu</i> 5-14-80 <i>B. Mattheu</i> 5-29-80				
ABANDONED THE COMMUNICATION CONDUIT IN PLACE. ROUTE THE COMMUNICATION CABLE FROM MORE ACCESSIBLE ROUTE.						
NO DWG CHANGES REQ.		<i>Shane Huppel</i> 6/24/80		26. QC ACCEPTANCE <i>JW Miller</i> 7-3-80 QC ENGINEER DATE AUTHORIZED INSPECTOR DATE		

E
5/15/80
SP



Corrected Copy

Block 16 continued:

REQUIREMENT(Continued): Additionally, 7220-E-47 Rev 2 paragraph 4.6.1 states: Separation from Class IE Circuits. Non-Class IE circuits are separated from Class IE circuits by the minimum separation requirements specified in Seciton 5.1.3, 5.1.4, or 5.6, or they become associated circuits."

Paragraph 5.1.4 General Plant Area, states:" Where plant arrangement preclude maintaining the minimum separation distanee, the redundant circuits are run in enclosed raceways that qualify as barriers or other barriers are provided between redundant circuits, The minimum distance between these redundant enclosed raceways and between barriers and raceways is 1 inch."

CONDITION: remain the same as on page 1.

JW Miller 5-19-80
J.M. Labrecque 5/19/80

Block #23 Cont.

Abandon the communication conduit and remove the cable. Install a new conduit routed to maintain proximity criteria and pull a new communication cable. No Dwg. Change required.

M.S. Hayes 6/20/80
Thomas Koppeler 6/24/80



ENR - J. KELLEHER

NONCONFORMANCE REPORT

1. PROJECT NAME: MIDLAND 1E2 JOB NO. 7220 19. NO. 9014 20. PAGE 1 OF 2

2. UNITS: FE2 3. DRAWING/PART NO. N/A 4. ITEM DESCRIPTION: POZZOLANIC ACTIVITY INDEX

6. OR SPEC NO. C-230 (A) 7. SERIAL NO. N/A 8. REPLACEMENT PART P/N 9. SOURCE: CONTRACTOR ALLIED CONCRETE 10. CONTRACTOR/SUPPLIER: INDETERMINATE

11. INSPECTION CRITERIA: IR NO. 5C-105-F NO. 178 12. ASME AUTHORIZED INSPECTION: YES NO 13. SKETCH ATTACHED: YES NO 14. DISCOVERED DURING: Rec'g Const Test 15. EQUIP FURNISHED BY: Client Eng FLD

16. NONCONFORMING CONDITION: SPECIFICATION C-230 (A) REV. 16 STATES IN PART THAT POZZOLANS SHALL CONFORM TO STANDARD SPECIFICATION FOR ELY ASH AND RAWLOR CALCIUM NUTRIENT POZZOLANS FOR USE IN PORTLAND CEMENT CONCRETE (ASTM C-618-72). CONTRARY TO THE ABOVE, THE ELY ASH RECEIVED ON 5/30/80 AT ALLIED CONCRETE DID NOT CONFORM TO ASTM C-618. THE POZZOLANIC ACTIVITY INDEX WITH LIME DID NOT MEET THE MINIMUM STRENGTH AT 7 DAYS.

17. REPORTED BY: James J. Kelleher DATE: 5/30/80 18. VALIDATED BY: [Signature] DATE: 5/30/80

21. ROUTING: TO FIELD ENGINEERING () TO OTHERS (SPECIFY) TO FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

22. () Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering
Field Engineering recommends to "use as is." The 7 day breaks were 199.1 psi. The minimum required per ASTM C-618 is 800 psi. Per ASTM C-618 Table 2 note b) the Pozzolanic Activity Index with lime is not to be considered a measure of the compressive strength.

23. PROJECT ENGINEERING DISPOSITION
Project Engineering concurs with Field Engineering. Fall in strength of specimens by 1 p.s.i. is considered to be insignificant and will have no effect on the concrete.
whenever Engineering recommends "Use As Is" 6-20-80 P. Shum 6/20/80
calc # 90c sheet # 8 P. Shum 6/10/80

24. DISPOSITION CONCURRENCE: REWORK reject repair use as is
AUTHORIZED INSPECTOR: [Signature] DATE: 7/7/80
AUTHORIZED INSPECTOR: [Signature] DATE: 7/7/80

Shaw

NO COORDINATION REQUIRED. P.S.



BLK. 16. CONTINUED

HOLD FOR ENQ. DISPOSITION, "Q" LISTED 1.205, 2 HOLD TAGS APPLIED.

Block 22 continued -

of concrete containing the pozzolan. Samples have been taken from the fly ash in question for further testing. These test will be forwarded to Project Engineering upon receipt.

Blk. 16 cont.)

Albetta
5/30/80

A conditional release is granted for non-Q applications. Corrections or removal can be accomplished without causing damage or contamination to associated plant equipment or structure.

J. J. [Signature]
PFE 6/3/80
Date

[Signature]
P/QC E 6/3/80
Date

[Signature]
LQAE 6/3/80
Date



Contact: L. Morris P.E.

97U- Non-testable

NONCONFORMANCE REPORT

AVD 6-27-80
B-10M

1. PROJECT NAME MIDLAND 1&2		JOB NO. 7220		19. NO. 3017	20. PAGE 1 OF 1		
2. UNIT(S) UNIT #2	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION POST TENSIONING TENDON PROTECTION	5. ITEM LOCATION Cont. #1 Vertical Tendons			
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A REV N/A SER NO. N/A		9. SOURCE Construction	10. CONTRACTOR/SUPPLIER N/A		
11. INSPECTION CRITERIA () DWG (X) SPEC () OTHER		IR NO. N/A NO C-87 Rev. 2	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By N/A Client () Eng () FLD	
16. NONCONFORMING CONDITION: Spec. 7220/C-87 Rev. 2 states in paragraph 2.2.5 that a monthly inspection shall be made to ensure the integrity of the in-place storage system. This inspection is to be carried out and documented on an "F-10". Contrary to this no monthly inspection was performed for the lot that consisted of the odd number vertical tendons (number V01-1 thru V109-1, excluding V11-1 and V101-1) that were inserted between 3/5/80 and 3/20/80 and should have been inspected on 4/5/80. Hold for Eng. Disp. No Hold Tags applied. Q-List No. 3.107				24. DISPOSITION CONCURRENCE			
				rework	reject	repair	use as is
				<p><i>A. Booth</i> 7-18-80 <small>PROJECT FIELD ENGINEER DATE</small> <small>APPROVED BY DATE</small> <small>PROJ CONSTR QO ENGINEER DATE</small></p>			
17. REPORTED BY <i>Paul Vade</i> 6/3/80				18. VALIDATED BY <i>[Signature]</i> 6/4/80			
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)				25. DISPOSITION RESULTS			
22. () Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering							
<p>THE FIELD RECOMMENDS TO "USE AS IS". SEE THE ATTACHED F-20 FORM FOR JUSTIFICATION OF THE RECOMMENDED DISPOSITION.</p> <p><i>L.S. Morris</i> 6/16/80 <i>[Signature]</i> 6/16/80</p>							
23. PROJECT ENGINEERING DISPOSITION Project Engineering has reviewed the above described situation and has determined that the subject tendons are to be "used as is". Prior to buttonheading all protective covering and grease coating was found to be adequate. During buttonheading and prior to greasing ^{STRESSING AVD 6-27-80} checks for corrosion evidenced no signs of rust. These observations (described in the attached F-20 form) indicate, that in this case, ^{SS AVD 6-27-80} omission of the inspection has not adversely affected the tendon anchorage components. Therefore, the tendons defined in continued on page 2.							
				26. QC ACCEPTANCE <i>[Signature]</i> 7/24/80 QC ENGINEER DATE			
				AUTHORIZED INSPECTOR DATE			

C
6-16-80
[Signature]



Block #23 Cont.

Block #16 of this NCR are considered adequate for use as originally intended.

No Dwg. or Spec. Rev. Required.

Coordination not required.

Alan V. Dausman 6-27-80

REM C-2746 ~~WD~~

J. Engler QE 7-15-80 JLH

MAINTENANCE INFORMATION

F-10-234 Rev. No. 1

Sheet 1 of 3

Item(s): TENDON WIRES INSTALLED IN SHEATHING BUT NOT STRESSED AND/OR GREASED

Equip. No. (s): ALL HORIZONTAL, VERTICAL, AND DOME TENDONS FOR CONTAINMENTS #1 & #2

Quality Classification

R Non-R

P.O. No. Spec. No.

C-2 C-87

DESCRIPTION

1.0 ITEMS TO BE INSPECTED

- A. Tendons placed in their sheathing in the Containment Building, including the coatings on the tendon wires.
- B. Weather protection and closures protecting the tendons in the sheathing.
- C. Inspection for identification is not required as this is assured at time of placement of tendon. Markings may be found on the bearing plates or the surrounding concrete to identify tendons which do not meet the requirements of this procedure.
- D. WIRES SAMPLED IN ACCORDANCE WITH SPEC. C-87 AS SPECIFIED BY FIELD ENGINEERING.

2.0 INSPECTION ACTIVITIES

2.1 Weather Protection and Closures

- 2.1.1 Each tendon placed has a protruding end, or "field end" and the opposite end, or "shop end" is retracted inside the trumpet. See drawings 7220-C2-9-8 & 7220-C2-157-3.
- 2.1.2 All Tendons - The "shop end" of a placed tendon shall be protected in the following manner:

A standard plastic pipe cap which fits snug shall be placed in the opening of the bearing plate and the edges sealed by sealant and/or tape to prevent exposure to the elements. Also, 4-1" diameter holes in the bearing plate shall be covered or plugged to keep moisture out. Inspect to see that this weather protection is intact and repair if necessary. Inspect every MONTH by random sampling.

- 2.1.3 Domes and Horizontals - The "field end" of placed tendons shall be protected in the following manner:

A standard plastic pipe cap with a hole large enough for a tightly bundled group of 170 tendon wires to fit through cut in it shall be placed over the exposed portion of the tendon. A piece of visqueen, slightly longer than the exposed length of tendon and wide enough to

Check List Code:

(Requirement(s) Accomplished

) See Comments

* Disposition Required

Documented & Verified by

J E Morris 5/16/80

1 1

-20C-1020 Sheet 1 of 4

QC INSPECTION REQ.

ITEM	CODE	QCS	DATE
2.1.1	I		
2.1.2	I		
2.1.3	I		
2.1.4	I		
2.2	I		
2.3.1	R		
2.3.2	R		
2.3.3	R		
2.3.4	R		

F-10 Approvals

J. Best 10/17/79

P. G. ... 10/17/79

P. G. ... 10/17/79

MAINTENANCE INFORMATION

F-10-234 Rev. No. 1

Sheet 2 of 4

Quality Classification

Q Non-Q

P.O. No. or Spec. No.
C-2

Item(s):

Equip. No. (s):

DESCRIPTION

2.1.3 continued -

wrap completely around the periphery of the pipe cap more than 1 complete wrap, shall be used to cover the exposed wires and shall be taped tightly around them. The pipe cap and visqueen (wrapped around the cap) shall be inserted into the opening in the base plate and sealed at the edges with rubber sealant and/or tape.

Inspect to see that all weather protection is intact and adequately sealed. If moisture can be seen collecting at the low spots inside the visqueen, it should be removed and the tendon wires inspected for C2-146, "Supplemental Instruction for Rating of Wire." The wire rating code should be identified on the F-20 form along with the number of the tendon inspected. Inspect every ~~MONTH~~ by random sampling.

2.1.4 Verticals Field End

The field ends of the vertical tendons will not have weather protection over the exposed ends as they will not be exposed directly to the elements. The kellys grip, rubber tape, and nose cone will be removed immediately after placing and the wires covered with 2090 P-4 grease or 1702 grease and visqueen until buttonheading begins. Inspection need only include a spot check for adequate grease coating and evidence or rusting in accordance with Chapter 3 of Spec. C2-146 "Supplemental Instruction for Rating of Wire". Tendons may or may not have plastic/visqueen covering over the ends. Inspect every ~~MONTH~~ by random sampling.

2.2 STORAGE OF TENDONS IN THE SHEATHS SHALL BE IN ACCORDANCE WITH SECT. 2.2 OF SPEC. C-87

2.3 TENDON INSPECTION PROCEDURE SHALL BE IN ACCORDANCE WITH SECT. 3.0 OF SPEC. C-87

2.3.1 - ~~WHERE~~ REMOVAL OF WIRES IS REQUIRED BY SPEC. C-87 THE FOLLOWING STEPS SHALL BE FOLLOWED.

Check List Code:
 Requirement(s) Accomplished
 See Comments
 Disposition Required

Documented & Verified by

IR _____ / /
 _____ / /

F-10 Approvals

MFE _____

PFQCE _____

PFE _____

MAINTENANCE INFORMATION

F-10-234 Rev. No. 11

Sheet 3 of 3

Quality Classification

Q Non-Q

P.O. No. Spec. No.

C-2 C-87

NCR 8017

Req. (s): GENERAL INSPECTION (MONTHLY) SHOP AND FIELD ENDS OF VERTICAL TENDONS, CONTAINMENT #1
 Equip. No. (s): VERTICAL TENDONS, ODD NUMBERS V-1 THRU V-109 (EXCEPT 101) AND EVEN NUMBERS V-16, 18, 20, 22, 72, 74, 76, AND 78. TOTAL OF 62 TENDONS.

DESCRIPTION

- 2.3.1e THE MME SHALL IDENTIFY A "LOT" SIZE IN ACCORDANCE WITH SPEC. C-87.
- 2.3.1b THE MME SHALL IDENTIFY THE TENDON FROM WHICH A WIRE IS TO BE REMOVED.
- 2.3.1c THE MME SHALL INSPECT THE REMOVED WIRES TO THE CRITERIA AS SPECIFIED IN SPEC. C-2-146.
- 2.3.1d THE MME SHALL VERIFY THAT REMOVED WIRES ARE PROPERLY IDENTIFIED AND STORED.

3.0 REFERENCES

- 3.1 FPG 4.000
- 3.2 FPG 5.000
- 3.3 7220-C2-146-9
- 3.4 7220-C87 (A)

Sect. 2.1.1. ALL TENDONS WERE STORED IN THE LOWERED (RETRACTED) POSITION WITH THE FIELD END EXPOSED IN THE GALLERY AND THE SHOP END INSIDE THE TRUMPLATE.

Check List Code:
 (Requirement(s) Accomplished
) See Comments
 * Disposition Required

Documented & Verified by

_____ / /

_____ / /

F-10 Approvals

MME _____ / /

PFQE _____ / /

PFE _____ / /

1 pg 5/5 NCR-3017
1/6/80

Sect. 2.1.2

ALL 62 VERTICAL TENDONS HAD THE GREASE CAN INSTALLED AT THE SHOP END (TOP SIDE OF THE CONTAINMENT) FOR TEMPORARY WEATHER PROTECTION. TENDONS REMAINED IN THE LOWERED POSITION UNTIL JUST PRIOR TO STRESSING. TENDON ANCHORAGE ENDS WERE EXPOSED FOR INSPECTION PRIOR TO STRESSING WHEN GREASE CAN WAS AGAIN REMOVED. NO EVIDENCE OF RUST OR CORROSION WAS FOUND.

Sect. 2.1.3 . . . N/A

Sect. 2.1.4

ALL KELLUMS GRIPS, NOSE CONES, AND RUBBER TAPE WERE REMOVED AFTER INSERTION AND THE EXPOSED WIRES COVERED WITH VISQUEEN FOR CLEANLINESS PURPOSES. TENDON ENDS REMAINED COVERED UNTIL BUTTONHEADING OPERATIONS WERE STARTED. ALL VERTICALS WERE EXTREMELY WELL PROTECTED AT THE FIELD END AS THE SHOP APPLIED COATING WAS VERY RUNNY AND QUICKLY COATED ALL WIRES AT THE FIELD END AS IT DRIPPED DOWN TO THE GALLERY.

Sect. 2.2 & 2.3 . . . N/A

COMMENTS :

ALL VERTICAL TENDONS IN THE LOT LISTED ABOVE HAVE SINCE BEEN STRESSED, 40 OF 62 HAVE BEEN GREASED. VISUAL CHECKS DURING WORK OPERATIONS DID NOT SHOW ANY SIGNS OF RUST OR CORROSION AT EITHER END. ALL TENDONS IN THE LOT WERE INSERTED BETWEEN 3-5-80 AND 3-20-80. STRESSING (AND OBSERVATIONS FOR CORROSION) BEGAN ON 4-18-80 AND CONTINUED THRU 5-5-80.

"CONDITION IDENTIFIED BY CPCO"

NONCONFORMANCE REPORT

S/U CODE: INDETERMINATE

1. Project Name midland		Job No. 7220		19. No. 3018	20. Page 1 of 2
2. Unit(s) 1	3. Drawing/Part No. N/A	Rev	4. Item Description stop heads with heat code HPW- Post Tensioning System	5. Item Location UNIT 1 & BOSEYVILLE	
6. P.O. Or Spec No. C-2-MC	7. Serial No. N/A	8. Replacement Part P/N _____ REV _____	SER NO. N/A	9. Source SUPPLIER.	10. Contractor/Supplier INRYCO

11. Inspection Criteria <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER NO. QCIR-R-1.00 REV 9		IR NO. N/A	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC:G <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input checked="" type="checkbox"/> ENG <input type="checkbox"/> FLD	15. Equip Furnished By
--	--	-------------------	---	--	--	------------------------

16. Nonconforming Condition:
QCIR-R-1.00-REV. 9 Para 2.1.C states in part: Review the quality verification documentation required by Form G-321D for availability, legibility and traceability. Contrary to the above, The heat treatment COFC from Accurate Steel Treating Co. For HT code #P.W. has not been signed. Metallurgist's name and title is referenced but no signature. Q number 151.107. Hold pending Eng. disposition, NO Hold tags applied.

24. Disposition Concurrence			
REWORK	REJECT	REPAIR	USE AS IS
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROJECT FIELD ENGINEER <i>[Signature]</i>		DATE 6/17/80	
PROJECT ENGINEER <i>[Signature]</i>		DATE 6/24/80	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

17. Reported By <i>[Signature]</i>	Date 6/19/80	18. Validated By <i>[Signature]</i>	Date 6/4/80
---------------------------------------	------------------------	--	-----------------------

21. Routing TO FIELD ENGINEERING TO OTHERS (SPECIFY)

22. Field Engineering Disposition FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

MATERIAL PROCUREMENT SUPERVISOR TO OBTAIN THE CORRECT DOCUMENTATION.

L.E. Morris 6/16/80
J.P. Bett 6/16/80

25. Disposition Results
Per attached letter from Inryco James D. Hamilton was signing as the Notary Public and an authorized representative of the company, therefore the Certificate of Compliance is acceptable as is, per ANSI N45.2.10.

23. Project Engineering Disposition

Frank Poite 7/1/80
Redelaney 7/1/80

26. QC ENGINEER <i>[Signature]</i>	DATE 7/1/80
AUTHORIZED INSPECTOR	DATE


3
600
7/1/80

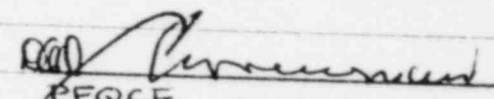


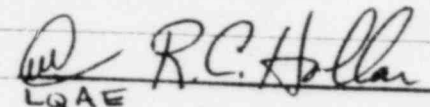
NONCONFORMANCE REPORT (CONT'D)

RD-11/80 3
2 2 JBL

A CONDITIONAL RELEASE IS GRANTED TO INSERT, BUTTONHEAD, STRESS, AND GREASE THE TENDONS IDENTIFIED IN BLOCK 16 ABOVE. CORRECTIONS OR REMOVAL CAN BE ACCOMPLISHED WITHOUT CAUSING DAMAGE OR CONTAMINATION TO ASSOCIATED PLANT EQUIPMENT OR STRUCTURE.


PFE 6.4.80
DATE


PFGCE 6/4/80
DATE


LQAE R.C. Hiller 6/4/80
DATE

INRYCO, I^{nc}.
Central Credit Division
Box 1009, 1550 North 25th Avenue
Melrose Park, Illinois 60161

312 345 8280 Suburban
312 379 9600 Chicago



Inryco

June 9, 1980

Bechtel Power Corporation
P. O. Box 2167
Midland, Michigan 48640

ATTENTION: Mr. Bob MacGlashan

SUBJECT: Shop Anchorhead Certificate of Compliance
of Heat Treating

Dear Mr. MacGlashan:

Per our telephone conversation of June 6, 1980 concerning heat treating reports.

You stated that certificates are notarized yet are not signed by a responsible party of Accurate Steel Treating Company which performed the heat treating.

James D. Hamilton, who was the notary public on the documents in question was also the Secretary on the Board of the company. Thus, Mr. Hamilton was signing these documents for compliance also.

Any questions regarding this matter, please feel free to contact me.

Very truly yours,

C. Brooks
Quality Control
Post Tensioning Division

CB:sjw

cc: H. F. Hendrickson
M. S. Johnson
D. W. Waitkus

NCR # 3018
page 3 of 3

Contacted = David Scott
6-5-80

Corrected Copy

S/U non testable

NONCONFORMANCE REPORT

1. PROJECT NAME Midland		JOB NO. 7220		19. NO. 3021	20. PAGE 1 OF 2		
2. UNIT(S) 2	3. DRAWING/PART NO. E-603 Sheet-1	REV 1	4. ITEM DESCRIPTION Cable Tray	5. ITEM LOCATION EL 674'0" Unit II See block 16 Note Process Inlet Room			
6. P.O. OR SPEC NO. NA	7. SERIAL NO. NA	8. REPLACEMENT PART P/N NA REV NA SER NO. NA		9. SOURCE Construction	10. CONTRACTOR/SUPPLIER NA		
11. INSPECTION CRITERIA <input checked="" type="checkbox"/> DWG () SPEC () OTHER		IR NO. 2BFH01 NO. E-42	12. ASME AUTHORIZED INSPECTION REQ'D () YES (X) NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client () Eng (X) FLD	
16. NONCONFORMING CONDITION: E-42, Sheet 8, note 6 and Sheet 3 give Tray Stencil requirements, also Sheet 1, note B references layout dwgs. For tray identification, and references E-36 for tray numbers, type, and size. Contrary to the above, Tray 2BFH01, is shown on 2 separate layout dwgs. E-603-sh-1 rev-1 and E-643 sh-1 rev 10. E-36 shows 2BFH01 on E-643. (Continued on page 2) Note = upper cable spreading room EL=674'6"				24. DISPOSITION CONCURRENCE ITEM #1 rework reject repair use as is <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> PROJECT FIELD ENGINEER DATE 6/20/80 PROJECT ENGINEER DATE 6/24/80 PROJ CONSTR QC ENGINEER DATE 6/30/80 AUTHORIZED INSPECTOR DATE			
17. REPORTED BY Harley Juttler		DATE 6-5-80		18. VALIDATED BY Shannon		DATE 6/20/80	
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING () TO OTHERS (SPECIFY)							
22. () Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering ① Project Engineering to assign new tray number to resolve non-conformance. DCN to be issued per resident engineering and FCN 2407, and is now acceptable. H. Juttler ② Resolved by FCN-E 2260 which was approved 6-4-80. David Scott 6/11/80							
23. PROJECT ENGINEERING DISPOSITION ① TRAY 2BFH01 IS TO REMAIN ON DWG E-643(Q) SH.1 AS IS. NEW TRAY NUMBERS TO BE ASSIGNED TO TRAYS ON DWG E-603(Q) SH.1 PER DCN #6, DWG E-603(Q) SH.1 ISSUED 6/20/80 ② PROJECT ENGINEERING CONCURS THAT FCN # E 2260 RESOLVES TRAY SIZE DISCREPANCY BETWEEN E-603 SH.1 REV 1 & E-36 AP 6/23/80 Shannon 4/24/80 NO DWG CHG REQ'D							
26. QC ACCEPTANCE H. Juttler				DATE 7-8-80			
QC ENGINEER				DATE			
AUTHORIZED INSPECTOR				DATE			

Elect

E-603-sh-1 rev-1

Corrected Copy

Block 16 Continued
47 6-20-80

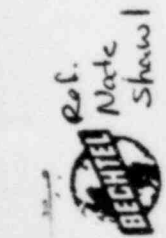
206H-01,02,03

② ALSO trays 20FG and 20FH, shown on E-603-sh.1 rev.-1, are actually one tray, utilizing a divider. E-36 shows 20FG to be 12 x 4 but shows 20FH to be 6 x 6.

206H-01,02,03
47 6-20-80

6/20/80

Hold tags applied Q-list-3.005 Hold For Engineering disposition.



NONCONFORMANCE REPORT

Start up code: Indeterminate

20. Page 1 of 2
7-7-80

1. Project Name Midland		Job No. 07220		19. No. 3022		20. Page 1 of 2	
2. Unit(s) IND		3. Drawing/Part No. NA		4. Item Description Piece #56" B fig 81H Spring Can		5. Item Location Standish	
6. P.O. Or Source No. M-106-AC FR88 rev 1		7. Serial No. NA		8. Replacement Part P/N NA REV		9. Source Supplier	
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC		IR NO. R-100-12168		SER NO. NA		10. Contractor/Supplier ITT Grinnell	
16. Nonconforming Condition: P.Q.I-R-100 rev 9 activity 3.2 requires material to be inspected for damage. Upon inspection, purchase order item number 2, 1 piece #56" B" fig 81H constant support spring can, a dent 6" wide and 9" long was found on the side of the can. Q number is indeterminate. Hold tag applied. Hold pending final disposition		12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		14. Discovered During <input checked="" type="checkbox"/> REC-G <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD	
17. Reported By John Kramer		Date 6/6/80		18. Validated By Richard E Thiffel		Date 7/2/80	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO OTHERS (SPECIFY)		24. Disposition Concurrency REWORK <input type="checkbox"/> REJECT <input type="checkbox"/> REPAIR <input type="checkbox"/> USE AS IS <input checked="" type="checkbox"/>		15. Equip Furnished By <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD	
22. <input type="checkbox"/> Field Engineering Disposition <input checked="" type="checkbox"/> Field Engineering Recommended Disposition TO PROJECT ENGINEERING		25. Disposition Results As per TWX received 6-30-80 from ITT Grinnell a dent with a maximum depth of 2.125" or less would not be detrimental to the operation of the hanger. Existing dent is approximately 1/8" deep. "Use As Is" D. Sheet 7/2/80					
23. Project Engineering Disposition PROJECT ENGINEERING CONCURS WITH FIELD ENGINEERING TO "USE AS IS", BASED UPON THE TWX RECEIVED FROM ITT GRINNELL, SINCE THE DEPTH OF THE DENT IS NOT SUFFICIENT TO AFFECT THE OPERATION OF THE SPRING. SEE RE-M-741. Richard E Thiffel 7/2/80		26. OC Acceptance John Kramer 7/14/80 ENGINEER DATE					
AUTHORIZED INSPECTOR		DATE		AUTHORIZED INSPECTOR		DATE	

(E) BO

084-7



BECHTEL MIDL
BECHTEL C SFO
BECHTEL C SFO
AG
BECHTEL MIDL

WU INFOMASTER 1-013253C132 06/30/80
TLX ITT GRNL A WAR
01 MIDLAND MICH 6-30-80
TLX 310-266-9497 BECHTEL MIDL
ATTN: DAVE BAKER

2680
17-106

L E DAVIS - SITE MGR
BECHTEL PWR COMPANY

6-27-80

ITT GRINNELL FIG. 31H
SIZE 56 TYPE B

THE SPRING COVER USED IS .040 THICK WITH AN I.D. OF 17.25 INCHES.
SPRING O.D. IS 13 INCHES. THEREFORE, A DENT WITH A MAXIMUM DEPTH OF
2.125 INCHES OR LESS WOULD NOT BE DETRIMENTAL TO THE OPERATION OF THE
HANGER.

IF THE DENT IS MORE THAN 2.125 INCHES DEEP, A HOLE MAY BE DRILLED IN
THE SPRING COVER SO A DENT PULLER MECHANISM MAY BE USED.

I ADVISE EXTREME CAUTION TO BE USED TO INSURE THAT THE DRILL DOES NOT
NICK THE SPRING AND CAUSE A STRESS RISER.

R. RUSSELL
SR. PRODUCT ENGINEER

ITT GRNL A WAR

1336 EST

BECHTEL MIDL

Continuation of Block 22

C-336. The tolerance check for these sections of liners was done. Since the construction of lining liners plate was not referenced, it will in Section 8.0 of Specification C-114 there was no requirement to take tolerance measurements. Therefore, this was not a nonconforming condition.

Alberts 7/2/80



NONCONFORMANCE REPORT

Slu Code: B&W EQUIPMENT

see pg. 4 for disposition

1. Project Name MIDLAND		Job No.		19. No. 3025	20. Page 1 of 2
2. Unit(s) 1 & 2	3. Drawing/Part No. N/A	4. Item Description 720 Vent Valve Modification Parts	5. Item Location WHSE. # 1		
6. P.O. Or-Spec. No. M102	7. Serial No. N/A	8. Replacement Part P/N N/A	9. Source Supplier	10. Contractor/Supplier BABCOCK & WILCOX	
11. Inspection Criteria <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER NO. 13157	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC-G <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input type="checkbox"/> FLD	15. Equip Furnished By	
16. Nonconforming Condition: QCIR-2.20, Act. No. 2.0 states: "Review the contents of the B&W Data Package for availability, legibility and traceability in accordance with the requirements of the B&W Quality Requirements Matrix.(QRM)." Contrary to this the Data Package has not been received. (Note: B&W has supplied a Statement of Conformance - Data Package to follow by mail.) Q-list # 40110 & 40210. Hold pending final disposition. One hold bag of. Led to nonconforming items.					
17. Reported By D. Delaney		18. Validated By D. Delaney		Date 6/12/80	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO OTHERS SPECIFY		25. Disposition Results Documentation has been received & accepted. D. Delaney 7/14/80	
22. <input checked="" type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING					
23. Project Engineering Disposition					
24. AUTHORIZED INSPECTOR D. Delaney				DATE 7/14/80	

6/11/80

CONDITIONAL RELEASE IS GRANTED TO ALLOW INSTALLATION OF
VENT VALVE MODIFICATION PARTS. ALL PARTS ARE RETRIEVABLE
AFTER INSTALLATION. REMOVAL WILL NOT CAUSE DAMAGE OR CONTAMINATION
TO THE PLANT REF. AEO 13107.

J. J. Schmitt
LQAE
DATE 6/12/80
J. S. Russell
PFQCF
DATE 6/12/80

B. C. Hollan
LQAE
DATE 6-12-80



NONCONFORMANCE REPORT

J Delaney
NCR 3025 pg 4 of 6
S/u Code: B&W EQUIPMENT 287-8-80

1. Project Name: **MIDLAND** Job No.: **7220**

2. Unit(s): **1 & 2** 3. Drawing/Part No.: **N/A** Rev: **N/A** 4. Item Description: **Vent Valve Modification Parts**

5. Item Location: **WHSE. # 1**

6. P.O. or Spec. No.: **M1.2** 7. Serial No.: **N/A** 8. Placement Part: **N/A** 9. Source: **Supplier** 10. Contractor/Supplier: **BABCOCK & WILCOX**

11. Inspection Criteria: **IR NO. R-2.20-13157** 12. ASME AUTHORIZED INSPECTION REQ'D: YES NO

13. SKETCH ATTACHED: YES NO

14. Discovered During: REC'D CONST TEST CLIENT ENG FLD

15. Equip Furnished By: _____

16. Nonconforming Condition: **QCTR-2.20, Act. No. 2.0 states: "Review the contents of the B&W Data Package for availability, legibility and traceability in accordance with the requirements of the B&W Quality Requirements Matrix (QRM)." Contrary to this the Data Package has not been received. (Note: B&W has supplied a Statement of Conformance - Data Package to follow by mail.) Q-list # 4.0110 & 4.0210. Hold pending final disposition. One hold tag applied to nonconforming items.**

24. Disposition Concurrence

REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER			DATE
PROJECT ENGINEER			DATE
PROJECT CONSTR QC ENGINEER			DATE
AUTHORIZED INSPECTOR			DATE

17. Reported By: *J Delaney* Date: **6/12/80**

18. Validated By: *[Signature]* Date: **6/17/80**

21. Routing: TO FIELD ENGINEERING TO OTHERS (SPECIFY)

22. Field Engineering Disposition FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING

Documentation has been received on site and has been forwarded to Quality Assurance. Please close the subject NCR in item 19.

23. Project Engineering Disposition: **H.A. Gutting 7-1-80
B & W Site Consultant**

25. Disposition Results

26. QC Acceptance

QC ENGINEER _____ DATE _____

AUTHORIZED INSPECTOR _____ DATE _____

NONCONFORMANCE REPORT (CONT'D)

ADDITIONAL PLEASE IS GRANTED TO ALLOW INSTALLATION OF
ENT VALVE MECHANISM PARTS. ALL PARTS ARE BETRIEVBABLE
AFTER INSTALLATION. REMONAL WILC NOT CORSE DAMAGE OBLIGATION
TO THE PLANT PER AEO 13107.

J. G. Sullivan Job 60260. 45 Reissued 6/13/80
PFE DATE P/QCE DATE

R. C. Hollen 6-12-80
LQAE DATE

10088-2
White Copy - Originator
Canary Copy - Field Engineer
Pink Copy - PQAE
Goldenrod Copy - QC
QC-033

Address reply to:

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640



July 1, 1980

Mr. Harold Guetling
Babcock & Wilcox Company
B & W Construction
P.O. Box 1984
Midland, MI 48640

Subject: Purchase Order 7220-M-1.2
NCR 3025

Dear Mr. Guetling:

A copy of a Bechtel Nonconformance Report, 3025, outlining subject discrepancy is attached.

Please notify Field Procurement's Material Coordinator, Bruce Reigelsperger, of your intentions to resolve this matter by July 7, 1980.

Very truly yours,

BECHTEL POWER CORPORATION
Agents for Consumers Power Co.

A handwritten signature in dark ink, appearing to read "R. C. Stubbs".

R. C. Stubbs
Project Field
Procurement Manager

BMR
RCS/BMR/lsl

attachment

xc: L. E. Davis w/a
E. D. Newman w/a

NCR 3025 pg 6 of 6
98-7-8-80



JIRA SIMANOVSKY

NONCONFORMANCE REPORT

S/U CODE INDETERMINANT

1. Project Name MIDLAND		Job No. 7220		19. No. 3026	20. Page 1 of 1
2. Unit(s) INDETERMINANT	3. Drawing/Part No. N/A	Rev N/A	4. Item Description P.O. 7220 F-45139 - 10 EA. 3" x 2" 10 EA. 4" x 2, 10 EA. 6" x 2, 5 EA. 3" x 1/2 SCREWS		5. Item Location WAREHOUSE #1
6. P.O. Or Spec No. 7220-F-45139	7. Serial No. N/A	8. Replacement Part P/N _____ REV N/A	SER NO. _____	9. Source SUPPLIER	10. Customer/Supplier GUYON ALLOYS
11. Inspection Criteria <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER		IR NO. R-1-00-12935	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC'G <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> LD
16. Nonconforming Condition PURCHASE ORDER 7220 F-45139 REQUIRES QUALITY VERIFICATION DOCUMENTATION IN ACCORDANCE WITH SPECIFICATION M-305 REV.5. M-305 REV.5 REQUIRES THE VENDOR TO SUBMIT A G321 D FORM ALONG WITH QUALITY VERIFICATION DOCUMENT PACKAGE. CONTRARY TO THE ABOVE NO G321 D FORM HAS BEEN SUBMITTED BY THE VENDOR FOR THE ABOVE REFERENCED ITEMS. HOLD FOR ENGINEERING DISPOSITION. 'Q' NUMBER IS INDETERMINANT. ONE (1) HOLD TAG APPLIED.					24. Disposition Concurrence REWORK <input type="checkbox"/> DEFECT <input type="checkbox"/> REPAIR <input type="checkbox"/> USE AS IS <input type="checkbox"/> DOC J. J. Russell 6/18/80 ENGINEER DATE PROJECT ENGINEER DATE 6/20/80 PROJECT COORDINATOR DATE
17. Reported By J. Kancharale	Date 6/10/80	18. Validated By J. J. Russell	Date 6/12/80		
21. Noting <input checked="" type="checkbox"/> TO FIELD ENGINEERING	<input type="checkbox"/> TO OTHERS (SPECIFY)				
22. <input checked="" type="checkbox"/> Field Engineering Disposition	<input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING				
23. Project Engineering Disposition Material Supervisor to obtain proper documentation. Sum 6-14-80					
26. QC Acceptance J. Kancharale					DATE 7/29/80
QC ENGINEER					AUTHORIZED INSPECTOR DATE



BRUCE MCKENZIE

NONCONFORMANCE REPORT

S/U CODE INDETERMINANT

1. Project Name MIDLAND		Job No. 7220		19. No. 3027	20. Page 1 of 1
2. Unit(s) 2	3. Drawing/Part No. N/A	Rev N/A	4. Item Description P.O. 7220-F-45749 ITEM #1 2 EA. NUTS (GLAND BOLTS) PC 22		5. Item Location WAREHOUSE #1
6. P.O. Or Spec No. 7220 F-45749	7. Serial No. N/A	8. Replacement Part P/N _____ REV N/A SER NO. _____		9. Source SUPPLIER	10. Contractor/Supplier ANCHOR DARLING VALVE
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO R-1-00-12833	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC'G <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD
16. Nonconforming Condition PURCHASE ORDER 7220 F-45749 STATES IN PART THAT ALL ITEMS TO COMPLY WITH ALL THE TERMS AND CONDITIONS OF THE ORIGINAL PURCHASE ORDER AND SPECIFICATION M-123C REV. 5. CONTRARY TO THE ABOVE SPECIFICATION M-123C DOES NOT ADDRESS SPARE OR REPLACEMENT PARTS, LEAVING THE STATUS OF THE DOCUMENTATION REQUIREMENTS INDETERMINANT. HOWEVER VENDOR HAS SUPPLIED A SIGNED COPY OF FORM G-321 D FROM SPEC M-123C. 'Q' NUMBER IS INDETERMINANT. HOLD FOR ENGINEERING DISPOSITION. ONE HOLD TAG APPLIED TO THE NON-CONFORMING ITEM.					24. Disposition Concurrence REWORK <input type="checkbox"/> REJECT <input type="checkbox"/> REPAIR <input type="checkbox"/> USE AS IS <input type="checkbox"/> DO NOT JFK DATE 6/16/80
17. Reported By J. Krawchuk Date 6/10/80		18. Validated By J. Russell/EDN Date 6/12/80		25. Disposition Results DOCUMENTATION RECEIVED, ACCORDING TO REVISED P.O. -- REVIEWED & ACCEPTED. JFK 7/29/80	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		23. Project Engineering Disposition Procurement supervisor to obtain documentation in accordance with rev. 1 to purchase order. (DT) D. Shook 6/16/80			
26. QC Acceptance J. Krawchuk QC ENGINEER		DATE 7/29/80			
AUTHORIZED INSPECTOR		DATE			



Corrected Copy

NONCONFORMANCE REPORT

S/U Non Testable

3458K

1. Project Name MIDLAND PROJECT		Job No. 7220		19. No. 3031	20. Page 1 of 2
2. Unit(s) 1#2	3. Drawing/Part No. N/A	Rev N/A	4. Item Description WATER METER CALIBRATION	5. Item Location CONCRETE BATCH PLANT	
6. P.O. Or Spec No. N/A	7. Serial No. N/A	8. Replacement Part PIN N/A REV N/A	SER NO. N/A	9. Source SUBCONTRACT	10. Contractor/Supplier ALLIED CONCRETE PRODUCTS
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. C-230	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> REC'G <input checked="" type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input checked="" type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD
16. Nonconforming Condition: SPEC. C-230 ¹⁶ SCN: 10001 REFERENCES APPENDIX "F" WHICH STATES IN PART THAT A QUALIFIED TESTING LAB. WILL CERTIFY THE METERING TESTS EVERY SIX (6) MONTHS. A.S.T.M. C-94-72 REQUIRES THE WATER ADDED SHALL BE MEASURED BY WEIGHT OR VOLUME TO AN ACCURACY OF 1 PERCENT OF THE TOTAL MIXING WATER. CONTRARY TO THE ABOVE,			24. Disposition Concurrence <input checked="" type="checkbox"/> REWORK <input type="checkbox"/> REJECT <input type="checkbox"/> REPAIR <input type="checkbox"/> USE AS IS		
17. Reported By Bill DeLeonard Date 6-13-80			18. Validated By [Signature] Date 6/13/80		
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)			25. Disposition Results		
22. <input checked="" type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING			<p>To date no "Q"-list concrete has been produced at the offsite Allied, Inc. batchplant, therefore the condition described per block 16 above, is not non conforming. Prior to any production of "Q"-list concrete the required water meter calibration will be performed. [Signature] 6/18/80</p>		
23. Project Engineering Disposition			29. QC Acceptance [Signature] Sub 7-22-80		
			QC ENGINEER DATE		
			AUTHORIZED INSPECTOR DATE		

see pg. 5 for concurrence

7



Corrected Copy

INCOMPLETE REPORT (CONT'D)

20 PAGE 2 OF 4

5/12/80
19 NCR NO 3031

16: CONTINUED: THE WATER METER HAS NOT BEEN CALIBRATED.
"Q" LIST # 6.101. ONE (1) HOLD TAG APPLIED. NO "Q" RELATED
CONCRETE HAS BEEN PLACED.

Block 16 continued on 7-9-80; The NAMCA checklist states that water meters shall be accurate to within ± 1 percent of the mixing water capacity or ± 1 gallon, whichever is greater. Contrary to the above, the calibration report of the panel water meter at Allied Concrete Inc. does not meet this criteria. This calibration report is attached. "Q" list is 6.101. I hold tag applied. *Sam Lind 7-9-80*

Block 22 (CONT. ON 7/22/80)

THE WATER METER WAS CALIBRATED ON 7/21/80 THERE FARE
PERMITTING PRODUCTION OF Q-LIST CONCRETE. ATTACHED ARE
THE CALIBRATION RESULTS.

J. K. Weber 7/21/80
R. Weber for J.P. Bette

NCR 3031 pg 4 of 5
951 248

ESTABLISHED 1880

United States Testing Company, Inc.

HOBOKEN, N. J. 07030

TELEPHONE: 201-792-2400



Client:

Allied Concrete Products
1928 James Savage Road
Midland, Michigan 48640

Subject:

Test of Water Batching Equipment
Allied Concrete Products

NUMBER

UST J1-7
(Refer to this number)

July 22,

Test Volume (gallons)	Test Weight (pounds)	Actual Volume (gallons)	Console Volume (gallons) Readout	Deviation
25	204	24.5	25	-2%
25	207	24.8	25	-.8%
25	209	25.1	25	+1%
50	415	49.8	50	-.4%
50	417	50.0	50	0
50	420	50.4	50	+1.6%
100	831	99.7	100	-.3%
150	1254	150.4	150	+3%
200	1675	200.9	200	+5%
250	2084	249.9	250	-.04%
300	2506	300.5	300	+2%
350	2922	350.4	350	+1%

Tested By: Tom Bejcek

Actual Water Volume corrected for actual water temperature of 58°F.
Tolerance: ± 1 gallon or ± .1%, whichever is greater per ASTM C-94-78a and
NRMCA Plant Certification Checklist, 1976.

Standard Thermometer: UST-602

Scale: Toledo Electric Platform Scale Model #8134. Calibrated with
Standard Weight set UST-34 Traceable to the National Bureau
of Standards.

Conforms to ASTM C-94-78a.

United States Testing Company, Inc.
BY John J. [Signature] 7-22-8

OUR LETTERS AND REPORTS ARE FOR THE EXCLUSIVE USE OF THE CLIENT TO WHOM THEY ARE ADDRESSED, AND THEIR COMMUNICATION TO ANY OTHER
THE USE OF THE NAME OF UNITED STATES TESTING COMPANY, INC., MUST RECEIVE OUR PRIOR WRITTEN APPROVAL OUR LETTERS AND REPORTS APPLY ONLY
THE SAMPLE TESTED AND ARE NOT NECESSARILY INDICATIVE OF THE QUALITIES OF APPARENTLY IDENTICAL OR SIMILAR PRODUCTS. SAMPLES NOT DESTROYED
THE REPORTS AND LETTERS AND THE NAME OF THE UNITED STATES TESTING COMPANY

NCR 3031 pg 3 of 5 7/22/80

6-30-80

ALLIED BATCH PLANT
WATER METER
CALIBRATION

Pg. 3 of 5 of NCR 3031
JK 7/22/80

STANDARD* (gal.)	PANEL (gal.)	DEV. IN %
0	0	-
50 1/2	50	-1.0
150	149	-0.66
199	198	-0.50
250	247	-1.20
256 1/2	252	-1.75
307	301	-1.95

THE ABOVE FINDINGS WERE VERIFIED BY REMITH OF U.S. TESTING ON 6-30-80.

* STANDARD METER WAS INSTALLED BY MIDLAND CITY WATER DEPT. METER NO. 4600 TYPE-6 ROCKWELL

**
CERTIFICATE OF COMP. SUBMITTED BY THE CITY OF MIDLAND.

631-0814 00000

** METER HISTORY

Number 4600 Size 3" Make Rockwell Type TYPE-6

Date Purchased _____ Cost \$ _____

Test New ~~10-75~~ 15-75 140 500

TESTED 6-30-80 Tested by James May

Date ~~6-30-80~~ 6-30-80 Address 4811 N Saginaw

Date	Repair Tag No.	Date	Repair Tag No.

O.C. REVIEW
7-1-80
JK 7-1-80



See block 22
disp dated 7/27/80

NONCONFORMANCE REPORT (CONT'D)

20. PAGE 5 OF 5 ²⁸ 7-22-80 19. NCR NO. 3031

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
X			
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	

24. Disposition Concurrence Item			
REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	
PROJECT ENGINEER		DATE	
PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE	



CIVIL

NONCONFORMANCE REPORT

S/U Non-testable

1. PROJECT NAME MIPLAND		JOB NO. 7220		19. NO. 3038	20. PAGE 1 OF 3
2. UNIT(S) 1E2	3. DRAWING/PART NO. N/A	REV N/A	4. ITEM DESCRIPTION MASTER FLOW 814 CABLE GROUT	5. ITEM LOCATION TESTING LAB	
6. P.O. OR SPEC NO. P.O.# F46088Q	7. SERIAL NO. N/A	8. REPLACEMENT PART PIN N/A REV N/A SER NO. N/A		9. SOURCE SUBCONTRACTOR	10. CONTRACTOR/SUPPLIER U.S. TESTING CO. INC.
11. INSPECTION CRITERIA () DWG () SPEC <input checked="" type="checkbox"/> OTHER		IR NO. N/A NO. CRDC-588-78a	12. ASME AUTHORIZED INSPECTION REQ'D () YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED () YES <input checked="" type="checkbox"/> NO	14. Discovered During () Rec'g () Const <input checked="" type="checkbox"/> Test
15. Equip Furnished By () Client () Eng <input checked="" type="checkbox"/> FLD		16. NONCONFORMING CONDITION: CORPS OF ENGINEERS SPEC. FOR NONSHRINK GROUT CRD-C588-78a STATES IN PART THAT THE NONSHRINK GROUT IN TERMS OF ITS VOLUME IS NOT LESS THAN ITS ORIGINAL VOLUME. CONTRARY TO THE ABOVE, THE SPECIMENS TESTED INDICATE SHRINKAGE. THE TEST RESULTS ARE ATTACHED. "Q" LIST # 6.101. (1) HOLD TAG APPLIED.			
17. REPORTED BY B. Tollemond		DATE 6-20-80	18. VALIDATED BY Paul Dognen		DATE 6/23/80
21. ROUTING: <input checked="" type="checkbox"/> TO FIELD ENGINEERING () TO OTHERS (SPECIFY)		22. <input checked="" type="checkbox"/> Field Engineering Disposition () Field Engineering Recommended Disposition to Project Engineering			
23. PROJECT ENGINEERING DISPOSITION		24. DISPOSITION CONCURRENCE NA			
This NCR is not applicable. This grout is covered under NCR 3005 and shall be dispositioned under that NCR.		25. DISPOSITION RESULTS THE NONCONFORMING TEST RESULTS WERE ADDED BY REVISION TO NCR 3005. THIS NCR CLOSED SINCE THE CONDITION IS CONTROLLED BY NCR 3005.			
		26. QC ACCEPTANCE B. Tollemond			
		DATE 7-1-80			
		DATE 6-27-80			
		DATE			
		DATE			

BD 6-27-80

BD 7-1-80



L.P. WEHNER

NONCONFORMANCE REPORT

S/U CODE INDETERMINANT

1. Project Name MIDLAND		Job No. 7220		19. No. 3043	20. Page 1 of 1	
2. Unit(s) INDETERMINANT	3. Drawing/Part No. N/A	Rev N/A	4. Item Description P.O. 45447 ITEM # 1 220 EA. 3/4" x 2 1/2" LONG THREADED NELSON STUD	5. Item Location WAREHOUSE # 1		
6. P.O. Or Spec No. 7220 F-45447	7. Serial No. N/A	8. Replacement Part P/N _____ REV N/A	9. Source SUPPLIER	10. Contractor/Supplier TRW-NELSON CO.		
11. Inspection Criteria <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER		IR NO R-1-00-13033 NO. 7220 F-45447	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC'G <input type="checkbox"/> CONST <input type="checkbox"/> TEST	15. Equip Furnished By <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD
16. Nonconforming Condition: PURCHASE ORDER 7220 F-45447 REV. 0 REQUIRES A STATEMENT OF CONFORMANCE AND A CERTIFICATE OF COMPLIANCE FOR THE MATERIAL RECEIVED ON AEO-13033. CONTRARY TO THE ABOVE STATEMENT OF CONFORMANCE AND A CERTIFICATE OF COMPLIANCE HAS NOT BEEN SUBMITTED BY THE VENDOR. HOLD FOR ENGINEERING DISPOSITION. 'Q' NUMBER IS INDETERMINANT. ONE (1) HOLD TAG APPLIED TO THE NON-CONFORMING ITEM.			24. Disposition Concurrence REWORK REJECT REPAIR USE AS IS Doc PROJECT FIELD ENGINEER DATE 7/7/80 PROJECT ENGINEER DATE 7/9/80 PROJECT CONSTR QC ENGINEER DATE AUTHORIZED INSPECTOR DATE			
17. Reported By J. Kanchara Date 6/30/80		18. Validated By R. Monuman Date 7/1/80		25. Disposition Results DOCUMENTATION RECEIVED & REVIEWED & ACCEPTED. J. Kanchara 7/9/80		
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		22. <input checked="" type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING Procurement supervisor to obtain proper documentation. J. Betts 7/3/80				
23. Project Engineering Disposition		26. QC Acceptance J. Kanchara DATE 7/9/80 GC ENGINEER AUTHORIZED INSPECTOR DATE				

CIVIL



PAUL GOUGEN

NONCONFORMANCE REPORT

3/4 CODE INDETERMINANT

1. Project Name MIDLAND		Job No. 7220		19. No. 3044	20. Page 1 of 1
2. Unit(s) 1#2	3. Drawing/Part No. F-7220-C-233A-F-30042-3-3	Rev N/A	4. Item Description HONEY COMB CRUSHABLE ELEMENT		5. Item Location WAREHOUSE #1
6. P.O. Or Spec No. 7220-F-30042 Rev 7	7. Serial No. N/A	8. Replacement Part V/N _____ REV N/A	SER NO. _____	9. Source SUPPLIER	10. Contractor/Supplier METALLURGICAL CONSULTANTS
11. Inspection Criteria <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER		IR NO R-1-00-13062	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC:G <input type="checkbox"/> CONST <input type="checkbox"/> TEST
15. Equip Furnished By <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD					15. Equip Furnished By
16. Nonconforming Condition: PURCHASE ORDER 7220 F-30042 REV.7, SPECIFICATION C-233 REV.18 ATTACHMENT 1 REQUIRES A COMPLETED G-3210 FORM TO ACCOMPANY EACH SHIPMENT. CONTRARY TO THE ABOVE THE VENDOR HAS SUPPLIED A G3210 FORM WITHOUT HIS SA SIGNATURE IN BLOCK 2 FOR THE MATERIAL RECEIVED ON AEO-13062.			24. Disposition Concurrence		
HOLD FOR ENGINEERING DISPOSITION. 'Q' NUMBER IS INDETERMINANT. ONE (1) HOLD TAG APPLIED TO THE NON-CONFORMING ITEM.			REWORK		
			REJECT		
			REPAIR		
			USE AS IS		
17. Reported By Skanchwala Date 6/30/80			25. Disposition Results COMPLETED G-3210 RECEIVED, & REVIEWED & ACCEPTED Skanchwala 7/10/80		
18. Validated By Skanchwala Date 7/1/80			DATE		
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)			DATE		
22. <input checked="" type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING Procurement supervisor to contact vendor and obtain proper documentation Abotts 7/2/80			DATE		
23. Project Engineering Disposition			DATE		
26. QC Acceptance Skanchwala QC ENGINEER			DATE 7/10/80		
AUTHORIZED INSPECTOR			DATE		

Notified F.E.'s
 Dave Scott
 R. Black



Elect.

See non testable unit

NONCONFORMANCE REPORT

1. Project Name MIDLAND		Job No. 7220			19. No. 3045	20. Page 1 of 4														
2. Unr(s) 2	3. Drawing/Part No. E-541	Rev 13	4. Item Description CORE drilled INTO & Embedded Conduit		5. Item Location Aux. 674'6" 3'W/8.6 9'4"K Rm 703															
6. P.O. Or Spec No. N/A	7. Serial No. N/A	8. Replacement Part PIN N/A REV N/A	SER NO. N/A	9. Source CONSTRUCTION	10. Contractor/Supplier N/A															
11. Inspection Criteria <input checked="" type="checkbox"/> DWG <input type="checkbox"/> SPEC <input type="checkbox"/> OTHER		IR NO. 2BE013	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> REC'G <input checked="" type="checkbox"/> CONST <input type="checkbox"/> TEST	15. Equip Furnished By <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD														
16. Nonconforming Condition: Conduit 2BE013, 4" G.R.S., embedded in Floor of Purge Rm # 703, elev 674'6", above location, has been core drilled. See concrete Drilling Permit # 6458 (Sheet # 2). Concrete has been chipped out in the vicinity of the damaged conduit. See concrete Drilling Permit # 6861. (Sheet # 3). Q list. 3.004				24. Disposition Concurrence REWORK <input type="checkbox"/> REJECT <input type="checkbox"/> REPAIR <input checked="" type="checkbox"/> USE AS IS <input type="checkbox"/> <table border="0"> <tr> <td><i>[Signature]</i></td> <td>7/21/80</td> </tr> <tr> <td>PROJECT FIELD ENGINEER</td> <td>DATE</td> </tr> <tr> <td><i>[Signature]</i></td> <td>7/18/80</td> </tr> <tr> <td>PROJECT ENGINEER</td> <td>DATE</td> </tr> <tr> <td><i>[Signature]</i></td> <td>7/27/80</td> </tr> <tr> <td>PROJECT CONSTR QC ENGINEER</td> <td>DATE</td> </tr> <tr> <td>AUTHORIZED INSPECTOR</td> <td>DATE</td> </tr> </table>			<i>[Signature]</i>	7/21/80	PROJECT FIELD ENGINEER	DATE	<i>[Signature]</i>	7/18/80	PROJECT ENGINEER	DATE	<i>[Signature]</i>	7/27/80	PROJECT CONSTR QC ENGINEER	DATE	AUTHORIZED INSPECTOR	DATE
<i>[Signature]</i>	7/21/80																			
PROJECT FIELD ENGINEER	DATE																			
<i>[Signature]</i>	7/18/80																			
PROJECT ENGINEER	DATE																			
<i>[Signature]</i>	7/27/80																			
PROJECT CONSTR QC ENGINEER	DATE																			
AUTHORIZED INSPECTOR	DATE																			
17. Reported By <i>[Signature]</i>	Date 7-1-80	18. Validated By <i>[Signature]</i>	Date 7/1/80																	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)	25. Disposition Results 1- Hold Tag removed. Conduit was satisfactory reamed & de-burred. Patch was cut from G.R.S. coupling & was large enough to cover hole. Patch was tack welded @ 4 Fin Places & R.T.V. silicone Rubber CAULK was applied to Contact Both Patch & Conduit. Caulk is now bonded. E-42 Requirements have been met. 7/31/80																			
22. Field Engineering Disposition <input checked="" type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING	26. QC Acceptance DC ENGINEER <i>[Signature]</i> 7-31-80 DATE AUTHORIZED INSPECTOR <i>[Signature]</i> 7-31-80 DATE																			
23. Project Engineering Disposition Repair conduit with procedure um E-42(Q). In order to assure a good seal between conduit and coupling a bead of RTV or similar caulking shall be used and minimize weld to tack welds to secure patch during repair of concrete PROJECT ENGINEERING CONCURS WITH THE USE OF RTV OR SIMILAR CAULKING AS A SEALANT IN CONJUNCTION WITH THE PROCEDURE IN E-42(Q). THE USE OF THIS SEALANT IS AN ADDITIONAL PRECAUTION TO PREVENT ANY MATERIAL TO ENTER THE CONDUIT. NO DWG REVISION IS REQUIRED <i>[Signature]</i> 7/3/80 <i>[Signature]</i> 7/15/80 <i>[Signature]</i> 7/11/80																				

E-28
7-28-80

CONCRETE DRILLING PERMIT NCR PAGE 2 OF 4

Project 7220

Permit No. 6458


Page 1 of 1

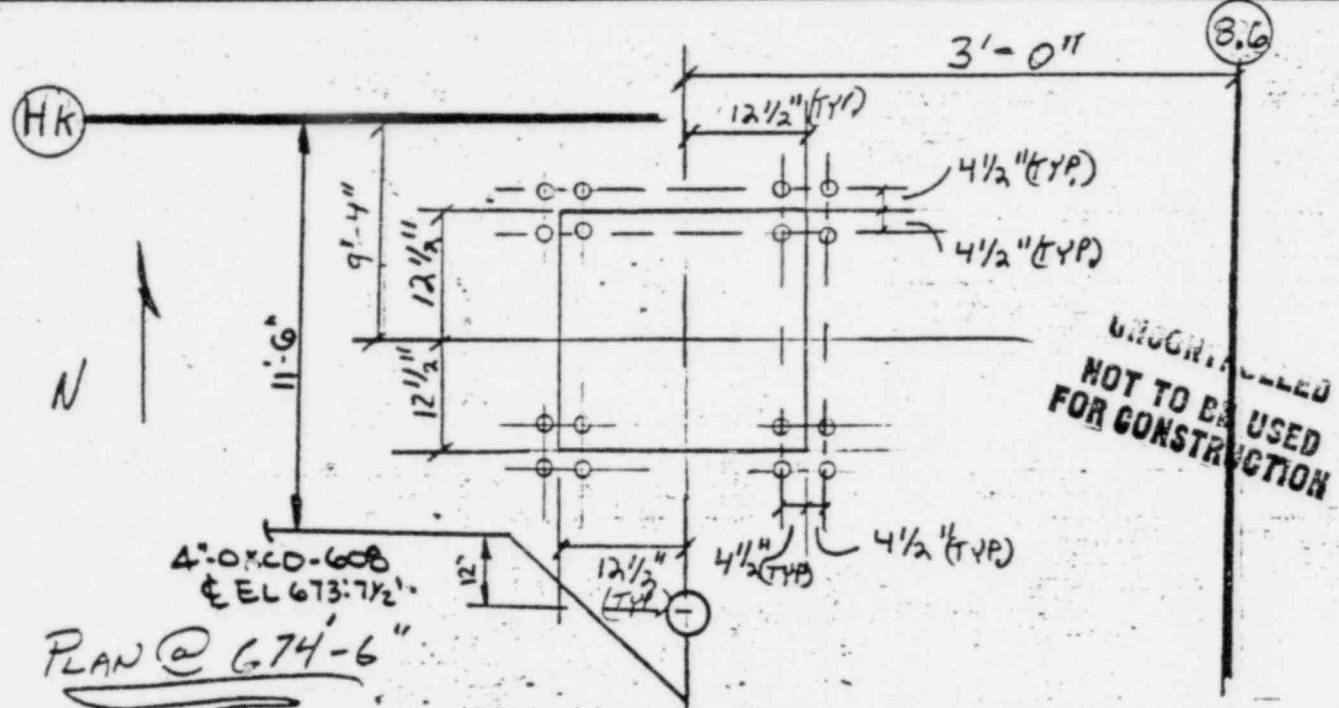
Prepared By: O. Surrine Discipline: Civil

Date 4/8/80

Unit _____ Bldg. AUX

Area _____ Elev. 674'-6"

Location of Q-Listed blockwall or poured wall substituted for Q-Listed blockwall 	Resident Engineer approval for attachment to Q-Listed blockwall or poured wall substituted for a Q-Listed blockwall. Appv'd _____ Not Appv'd _____ Date _____ By: _____
---	---



PLAN @ 674'-6"

- Notes: (1) SEE LATEST DESIGN DRAWING REVISION AND CHANGE ADDENDA PRIOR TO DRILLING.
 (2) DO NOT CUT REBAR WITHOUT FIELD ENGINEERS APPROVAL. NO REBAR CUTTING IS ALLOWED IN Q-LISTED CONCRETE BLOCKWALLS OR POURED WALLS SUBSTITUTED FOR Q-LISTED CONCRETE BLOCKWALLS.

Specific Instruction and Location Tolerance: DRILL 16 - 2" Ø HOLES

Note: If rebar encountered, notify OAK SIRPINE
6" deep

If ground cable encountered, notify DAVE SCOTT
 Before moving hanger, notify _____

Loads per drawing C-2050: (list only for attachments to Q-Listed blockwalls or poured walls substituted for Q-Listed blockwalls)

Reference Drawings: C-1162 Rev 0

Approved By: (Not required for attachments to Q-listed blockwall or poured walls substituted for Q-listed block walls.)

Civil O. Surrine Date 4/10/80 Piping [Signature] Date 4/10/80
 Elect [Signature] Date 4/9/80 Instru [Signature] Date 4/11/80
 Mech [Signature] Date 4/10/80

CONCRETE DRILLING PERMIT NCR. PAGE 3 OF 4

Permit No. 6861

JSP 7-1-80 PAGE 1 of 1

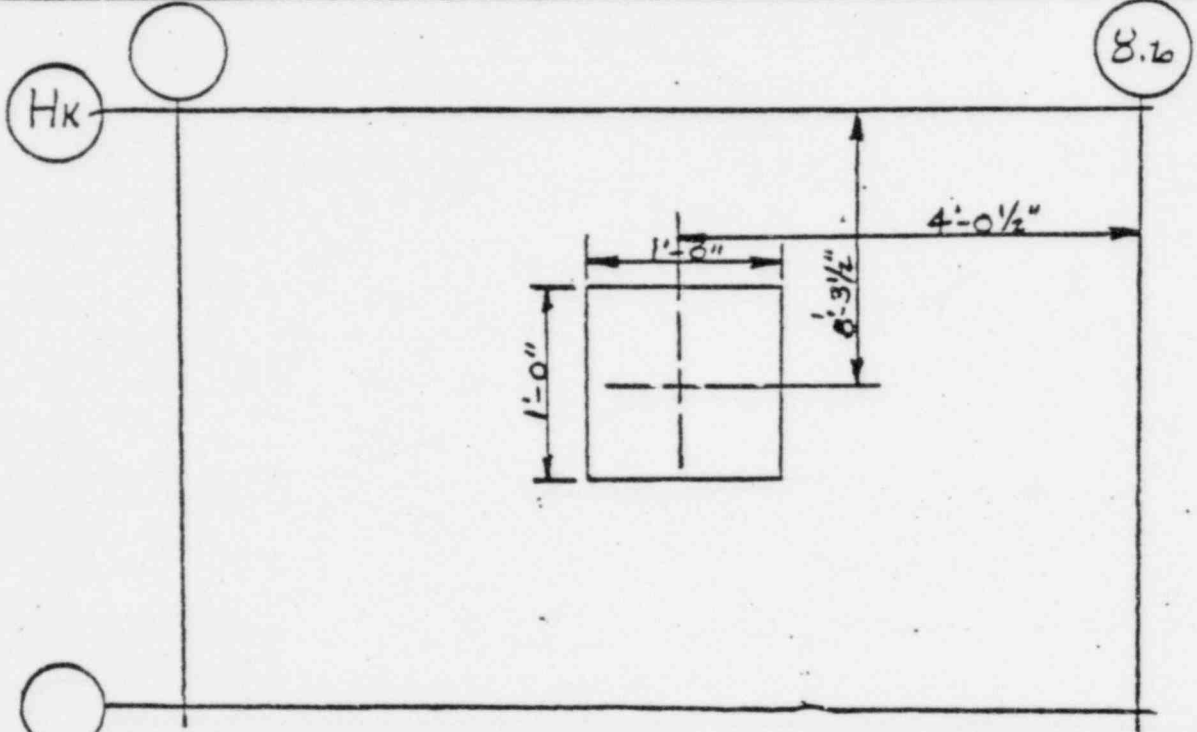
Project 7220

Prepared By: BRIAN OLDHAM Discipline: CIVIL Date 6/18/80

Unit Common Bldg. Aux Area 2 Elev. 674'-6"

Location of Q-Listed blockwall or poured wall substituted for Q-Listed blockwall
N/A

Resident Engineer approval for attachment to Q-Listed blockwall or poured wall substituted for a Q-Listed blockwall.
Appv'd _____ Not Appv'd _____ Date _____
By: _____



- Notes: (1) SEE LATEST DESIGN DRAWING REVISION AND CHANGE ADDENDA PRIOR TO DRILLING.
 (2) DO NOT CUT REBAR WITHOUT FIELD ENGINEERS APPROVAL. NO REBAR CUTTING IS ALLOWED IN Q-LISTED CONCRETE BLOCKWALLS OR POURED WALLS SUBSTITUTED FOR Q-LISTED CONCRETE BLOCKWALLS.

NCR-3045
Page 3 of 4

Specific Instruction and Location Tolerance: CHIP AREA SHOWN 1' X 1' FOR REPAIR OF

Note: If rebar encountered, notify BRIAN OLDHAM (X334).
If ground cable encountered, notify _____.
Before moving hanger, notify _____.

4" GRS CONDUIT. PENETRATION DIRECTLY SOUTH OF AREA SHOWN, MAY BE UTILIZED.
Loads per drawing C-2050: (list only for attachments to Q-Listed blockwalls or poured walls substituted for Q-Listed blockwalls)

Reference Drawings: RE: DRILL PERMIT # 6458 & FR # C-2501 (ATTACHED)

Approved By: (Not required for attachments to Q-listed blockwall or poured walls substituted for Q-listed block walls.)

Civil B. Oldham Date 6/18/80 Piping [Signature] Date 6/23/80
 Elect. [Signature] Date 6-23-80 Instru. [Signature] Date 6/24/80
 Mech. N/A Date _____

Ref. Claude Wynne

NONCONFORMANCE REPORT

Start up code: Indeterminate

1. Project Name Midland		Job No. 07220		19. No. 3049	20. Page 1 of 1
2. Unit(s) IND	3. Drawing/Part No. NA	4. Item Description Selector SW operator	5. Item Location QC HOLD AREA WAREHOUSE I		
6. P.O. Or Spec No. F46905	7. Serial No. NA	8. Replacement Part P/N NA	9. Source Supplier	10. Contractor/Supplier General Electric Supply Co.	
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER NO. G-33 REV 12		12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During	15. Equip Furnished By
16. Nonconforming Condition: Purchase Order 7220-F46905 requires a statement of Conformance as Quality Verification Documentation Submittal. Contrary to this, NO Statement of Conformance has been received. I Hold tag applied "Q" number is indeterminate. Hold Pending final disposition					
17. Reported By John Kramer		18. Validated By John Kramer		DATE 7/9/80	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING		25. Disposition Results Documentation received reviewed and accepted.			
22. <input checked="" type="checkbox"/> Field Engineering Disposition		<input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING			
23. Project Engineering Disposition Procurement supervisor to obtain documentation. Claude Wynne 7-10-80					
24. Disposition Concurrency		REWORK	REJECT	REPAIR	USE AS IS
PROJECT ENGINEER John Kramer		PROJECT ENGINEER John Kramer		DATE 7/11/80	
PROJECT CONSTR QC ENGINEER		PROJECT CONSTR QC ENGINEER		DATE	
AUTHORIZED INSPECTOR		DATE			
26. QC acceptance John Kramer		DATE 7/21/80			
AUTHORIZED INSPECTOR		DATE			



FIRA SIMANOVSKY

NONCONFORMANCE REPORT

S/U CODE INDETERMINANT

1. Project Name MIDLAND		Job No. 7220			19. No. 3052	20. Page 1 of 1	
2. Unit(s) INDETERMINANT	3. Drawing/Part No. N/A	Rev N/A	4. Item Description P.O. 7220 F-45396 Item # 1 to 500 1 1/2" 300# SOCKET WELD ORIFICE FLANGE.		5. Item Location WAREHOUSE #1		
6. P.O. Or Spec No. 7220 F-45396	7. Serial No. N/A	8. Replacement Part P/N _____ REV N/A		9. Source SUPPLIER	10. Contractor/Supplier HUB INCORPORATION		
11. Inspection Criteria <input type="checkbox"/> DWG <input type="checkbox"/> SPEC <input checked="" type="checkbox"/> OTHER		IR NO. R-1-00-13208	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC:G <input type="checkbox"/> CONST <input type="checkbox"/> TEST	15. Equip Furnished By <input type="checkbox"/> CLIENT <input type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD
16. Nonconforming Condition: PURCHASE ORDER 7220 F-45396 REQUIRES QUALITY VERIFICATION DOCUMENTATION TO ACCOMPANY THE MATERIAL. CONTRARY TO THE ABOVE NO QUALITY VERIFICATION DOCUMENTATION HAS BEEN SUBMITTED BY THE VENDOR & FOR THE MATERIAL SUPPLIED ON AEO 13208. HOLD FOR ENGINEERING DISPOSITION. 'Q' NUMBER IS INDETERMINANT TWO (2) HOLD TAGS APPLIED TO THE NON-CONFORMING ITEM.				24. Disposition Concurrence			
				REWORK	REJECT	REPAIR	USE AS IS
				PROJECT FIELD ENGINEER DATE <i>[Signature]</i> 7/17/80			
				PROJECT ENGINEER DATE <i>[Signature]</i> 7/17/80			
				PROJECT CONSTR QC ENGINEER DATE <i>[Signature]</i>			
				AUTHORIZED INSPECTOR DATE			
17. Reported By <i>[Signature]</i>		Date 7/10/80		18. Validated By <i>[Signature]</i>		Date 7/11/80	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO OTHERS (SPECIFY)					
22. <input checked="" type="checkbox"/> Field Engineering Disposition		<input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING					
Procurement to obtain proper documentation, (F.S.) <i>[Signature]</i> 7-16-80							
23. Project Engineering Disposition							
25. Disposition Results DOCUMENTATION RECEIVED, REVIEWED & ACCEPTED. <i>[Signature]</i> 7/23/80							
				26. QC Acceptance <i>[Signature]</i>		Date 7/23/80	
				QC ENGINEER		DATE	
				AUTHORIZED INSPECTOR		DATE	



F.I. CONTACT : NICK MARCO

S/U - NON TESTABLE

NONCONFORMANCE REPORT

1. PROJECT NAME MIDLAND		JOB NO. 7220		19. NO. 3054	20. PAGE 1 OF 2
2. UNIT(S) UNIT 1 (C-38-13-6)	4. ITEM DESCRIPTION Drilling in Secondary Shield Wall without permit CONT. #1				
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART P/N N/A	9. SOURCE CONSTRUCTION	10. CONTRACTOR/SUPPLIER N/A	
11. INSPECTION CRITERIA <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER	IR NO. C-160-281	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input type="checkbox"/> Rec'g <input checked="" type="checkbox"/> Const <input type="checkbox"/> Test	15. Equip. Furnished By <input type="checkbox"/> Client <input checked="" type="checkbox"/> Other
16. NONCONFORMING CONDITION: Spec. C-306 A Sec. 2.2 states, " No grouted ANCHOR BOLTS SHALL BE INSTALLED IN THE SECONDARY SHIELD WALL UNLESS THE DRILLING IS DONE IN ACCORDANCE WITH A PROCEDURE APPROVED BY PROJECT ENGINEERING". FIELD INSTRUCTION FIG-1.111 A Sec. I, pg. 2, para 3(9) STATES, IN PART, "IT SHALL BE THE RESPONSIBILITY OF THE PERMIT ORIGINATOR AND/OR THE REVIEWING DISCIPLINE ENGINEERS (CONTINUED)					
17. REPORTED BY Lane May	DATE 7/15/80	18. VALIDATED BY [Signature]	DATE 7/17/80	24. DISPOSITION CONFORMANCE	
21. ROUTING: <input checked="" type="checkbox"/> FIELD ENGINEERING <input type="checkbox"/> TO OTHERS (SPECIFY)		AUTHORIZED INSPECTOR [Signature] DATE 7/17/80			
22. <input checked="" type="checkbox"/> Field Engineering Disposition <input type="checkbox"/> Field Engineering Recommended Disposition to Project Engineering					
Drill permit # 7022 has been issued, in accordance with REMC-2543, D. Sheet 7/17/80					
23. PROJECT ENGINEERING DISPOSITION					
Verified drill permit 7022 issued REMC-2543 given Project Engineer's approval [Signature] DATE 7/17/80					
26. ACCIDENTANCE QC ENGINEER [Signature] DATE 7/17/80					
AUTHORIZED INSPECTOR [Signature] DATE 7/17/80					



BLOCK #16 - CONTINUED-

to establish tolerances to AVOID DRILLING INTO EMBEDDED PIPE OR CONDUIT."

CONTRARY TO THE ABOVE, GROUTED ANCHOR BOLT HOLES FOR HANGER 638-13-6 (18-1ELB-1-H6) WERE DRILLED IN THE SECONDARY SHIELD WALL WITHOUT PROJECT APPROVAL, AND NO CONCRETE DRILLING PERMIT WAS ISSUED.

HANGER LOCATION: 9'11³/₁₆" E/φ, 45'11" N/φ
el. 621'1¹/₂"

2 holes: (1) 1³/₄" φ, 5" deep

(1) 1³/₄" φ, 3³/₈" deep (rebar encountered but not cut.)

HOLD FOR ENGINEERING DISPOSITION.

Q-LIST 1.105

1 HOLD TAG APPLIED.

BECHTEL Ref. Paul Beguen

NONCONFORMANCE REPORT

Start up Code! Indeterminate.

1. Project Name Midland		Job No. 07220		19. No. 3053	20. Page 1 of 1
2. Unit(s) IND.	3. Drawing/Part No. NA	4. Item Description 5/16" Hex Nuts	5. Item Location QC HOLD AREA WAREHOUSE I		
6. P.O. Order No. F45571	7. Serial No. NA	8. Replacement Part P/N NA REV	9. Source Supplier	10. Contractor/Supplier Talley Fasteners	
11. Inspection Criteria <input type="checkbox"/> DWG <input checked="" type="checkbox"/> SPEC <input type="checkbox"/> OTHER	IR NO. R-100-13187	12. ASME AUTHORIZED INSPECTION REQ'D <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	13. SKETCH ATTACHED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	14. Discovered During <input checked="" type="checkbox"/> REC'G <input type="checkbox"/> CONST <input type="checkbox"/> TEST <input type="checkbox"/> CLIENT <input checked="" type="checkbox"/> ENG <input checked="" type="checkbox"/> FLD	
16. Nonconforming Condition: Purchase Order number 7330-F-45571 requires item number 2, 77 pieces of 5/16" dia. Heavy Hex nuts to be ASTM A-194 Grade 8C. Contrary to this, 100% of sample 20 inspected were found to have markings of Grade 8 rather than Grade 8C. Q number is indeterminate. Hold tag applied. Hold Pending final disposition					
17. Reported By John Hamon		Date 7/10/80		18. Validated By John Hamon 7/10/80	
21. Routing <input checked="" type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO FIELD ENGINEERING		<input type="checkbox"/> TO OTHERS (SPECIFY)	
22. <input type="checkbox"/> Field Engineering Disposition		<input type="checkbox"/> FIELD ENGINEERING RECOMMENDED DISPOSITION TO PROJECT ENGINEERING			
23. Project Engineering Disposition					
24. Disposition Concurrence		REWORK	REJECT	REPAIR	USE AS IS
PROJECT FIELD ENGINEER		DATE	DATE	DATE	DATE
PROJECT ENGINEER		DATE	DATE	DATE	DATE
PROJECT CONSTR QC ENGINEER		DATE	DATE	DATE	DATE
AUTHORIZED INSPECTOR		DATE	DATE	DATE	DATE
25. Disposition Results Nonconforming condition already identified on NCR # 3053 therefore this NCR is closed To NCR 3053 John Hamon 7/29/80					
26. QC Acceptance John Hamon 7/29/80 ENGINEER DATE					
AUTHORIZED INSPECTOR		DATE	DATE	DATE	DATE

QAR'S WRIT'EN

Extent of Fill

Confined area

Testing Frequency

Varies from 1 per 10 cubic yard to 1 per 100 cubic yard, or one per backfill location, whichever is less, as determined by the onsite geo-technical soils engineer."

You are requested to provide a detailed description on the intent of "confined area" and backfill location". This detailed description should address, but not be limited to, such considerations as volumetric classification, adjacent backfill placements, continuous placement in a given location, non-continuous placement in a given location, and combination of continuous and non-continuous placement in a given location.

B. Specification C-211, Revision 10 states in part:

"8.12 FAILING TEST

All material represented by failing tests are to be reworked until the specified density and/or moisture is obtained. No material shall be placed on any known failing material until satisfactory tests are obtained."

You are requested, based on the detailed description given for "A" above, to please provide a detailed, quantitative description on the intent of "all material represented by failing tests" and "reworked".

- i.e.
- Removal of some (all?) suspect material?
 - Additional compactive effort?
 - Each lift reworked? or some quantitative definition of limit on rework from top surface?

This QAR issued per minutes of Soils Committee Meeting of 7/10/80.

QAR'S CLOSED

REQUEST

W. Bird

AI: H-13

From: L. A. Dreisbach		①
To: L. E. Davis	② Control Document ref.: FPE 7.000	③ QAR Ident. No.: SD-251
Action Requested: Concern:		⑤
<p>The QA Tracking Program has indicated a marked increase in the number of occurrences of cable and wire terminations not being installed in accordance with Field Procedure FPE 7.000.</p> <p>The discrepancies occurring most often were:</p> <p>(1) No gap between the cable insulation and the barrel of the lug;</p> <p>(2) Nicked conductors.</p> <p>Eighty-two (82) discrepancies were noted in this July Reporting Period. The discrepancies were in DR's listed on the following page.</p> <p style="text-align: center;">(Continued on Page 2)</p>		
Signature: <i>RY L.A. Dreisbach</i>	⑥ Date: 8/24/79	⑦ Reply Requested by: 9/24/79
Reply: Action:		⑨
<p>1. IOM from R. L. Castleberry to B. P. Kononetz, Dated 5/21/80 gives Project Engineering disposition to the subject of nicked conductors.</p> <p>2. Per disposition from D. L. Clayton dated 9/10/79, to this QAR, "Field personnel has been instructed in the proper termination procedure per FPE-7.000. . . "</p> <p>A check of 200 Electrical QC inspection records from 11/79 to 7/80 showed only 2 cases of nicked conductors.</p>		
Signature: 1. R.L.Castleberry (IOM dated 5/21/80) 2. D. L. Clayton	⑩	Date: 1. 5/21/80 2. 9/10/80
Action Verified: R. Yee <i>R. Yee</i>	⑫	Date: 7/21/80

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Deficiency ListDR's

E-1246	E-1398
E-1287	E-1402
E-1288	E-1403
E-1289	E-1404
E-1290	E-1406
E-1291	E-1408
E-1294	E-1415
E-1295	E-1416
E-1296	E-1417
E-1299	E-1420
E-1357	E-1422
E-1374	E-1423
E-1381	E-1426
E-1382	E-1432
E-1383	E-1451
E-1384	E-1452

Recommended Action

1. Have Proj. Engineering provide acceptance criteria for nicked conductors. (For example, 4 or less nicked or broken strands for a #8 stranded cable). Also, state source of criteria (vendor, TPO, staff, etc.).
2. Personnel performing crimping and terminations to be instructed in the proper termination procedures of FPE-7.000.

QUALITY ACTION REQUEST

cc: J. Corley
D. Miller
W. Bird

AI: H-51

From:	R. Hollar		①
To:	W. L. Barclay	② Control Document ref.: PQCI 7220/SC-1.16	③ QAR Ident. No.: SD-285
Action Requested:	S/C No. C-18		⑤
<p>On 10-31-79, Quality Control performed a review of Graver drawings in use on site at the request of QA and determined that fifteen out of sixteen drawings reviewed were not approved by Bechtel for the current revision in use. Action was taken immediately to correct this concern. (This contract initiated work on site eight weeks ago).</p> <p>It is requested that Quality Control review this PQCI and other PQCI's related to surveillance of subcontractor design document control activities for initiation of generic and programmatic changes to preclude recurrence. PQCI SC-1.16 does not clearly identify reviewing subcontractor working drawings, specifications, manuals</p>			
Signature:	<i>W.D. Dreisbach</i>	⑥ Date: 11/1/79	⑦ Reply Requested by: 12/1/79
Reply:	Quality Control has provided the following response to the subject QAR:		
<p>The drawing review performed by Bechtel Q.C. at Bechtel Q.A.'s request, was a review of Graver's Document Control Center for drawings on hand.</p> <p>The drawing's revisions found without Bechtel approval were not drawings in use by Graver Construction.</p> <p>Bechtel's Q.C. program requires surveillance inspection of the subcontractor's compliance to Bechtel approved drawings in use for the installation/fabrication stage of construction.</p>			
Signature:	QCFM 8132, Newman to Dreisbach, dated 6/27/80 signed by E. D. Newman	⑩	Date: 6/27/80
Action Verified:	<i>R.E. Sevo</i>	⑫	Date: 7/11/80

8/2/74

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and procedures for required approvals and latest applicable revisions and approvals in a timely manner.

Similar document Control deficiencies have been previously identified for the following subcontracts:

<u>S/C No.</u>	<u>Subcontractor</u>	<u>Finding</u>
A-15	J. L. Manta	SA-50
M-151	Zack	NRC 78-07-03
C-208	U. S. Testing	QAR SD-268
C-208	U. S. Testing	QAF SA-62.

W. L. Barclay
QAR SD-285 - CLOSURE
Page 2 "REPLY" block 9 Continued

To date this requirement has been met as reflected in the Q.C. Subcontract Surveillance Inspection Reports (SSIR's).

A training session (QCFM-8133) was held for all Subcontract QCE on PSP G-9.1, Section 3.2.1.1 re-emphasizing the requirements for verifying the subcontract's compliance with the requirements of the subcontract documents and implementation of his quality program. It was pointed out that one attribute of this compliance was verification that subcontract craftsmen and QCE's were using the latest Bechtel approved criteria (Drawings, Spec's, etc.).

QUALITY ACTION REQUEST

cc: J. Corley
D. Miller
W. Bird

H-94

From: L. A. Dreisbach		①
To: P. Corcoran	② Control Document ref.: ASME Sec. III Sub Sec. ND Para ND	③ QAR Ident. No.: SD-309
Action Requested: NCR #2198 was written against spool piece #OHBC-78-5657-38-1 for having an indentation of .050" deep. The disposition stated that the defect be faired into the surrounding surface and examined in accordance with ED-1. The only examination performed was a Penetrant Test.		⑤
QUALITY ACTION REQUESTED:		
Reopen the NCR and perform a U.T. examination to determine the actual wall thickness and confirm that after rework the area still measures greater than the required wall thickness of .098.		
Signature: <i>L. A. Dreisbach</i>	RCA ⑥	Date: 2/27/80 ⑦
Reply Requested by: 3/12/80		⑧
Reply: Ref: IOM L. H. Curtis to L. Dreisbach states, in part, "NCR#2198 has been reopened and a U.T. examination has been performed, NDE Report #10991, verifying that the defect is no more extensive than first indicated. NDE Report #10991 has been attached to the NCR. This NCR has been redispositioned on July 7, 1980. This closes out Engineering action on QAR SD-309."		
Signature: Per IOM referenced above.		⑩
Date:		⑪
Action Verified: <i>John W. Crox</i>		⑫
Date: 7/29/80		⑬

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16JA

20

NONCONFORMANCE REPORT

1. PROJECT NAME MIDLAND		JOB NO. 7220		19. NO. 2198	20. PAGE 1 OF 2	
2. UNIT(S) 1 & 2	3. DRAWING/PART NO. M-657.5H 38	REV 3/FI	4. ITEM DESCRIPTION SPOOL OHBC- 8 S-657-38-1	5. ITEM LOCATION AUX. BLDG. 2L 659 7" E/T.H. 11'4" S/G		
6. P.O. OR SPEC NO. N/A	7. SERIAL NO. N/A	8. REPLACEMENT PART PIN N/A REV N/A SER NO. N/A		9. SOURCE CONSTRUCTION	10. CONTRACTOR/SUPPLIER N/A	
11. INSPECTION CRITERIA () DWG (X) SPEC () OTHER		IR NO. P. 110-657-38-1 NO. M-204	12. ASME AUTHORIZED INSPECTION REQ'D (X) YES () NO	13. SKETCH ATTACHED () YES (X) NO	14. Discovered During () Rec'g (X) Const () Test	15. Equip Furnished By () Client (X) Eng () FLD
16. NONCONFORMING CONDITION: SPECIFICATION M-204 REV. 10 SECTION 5.2.6 STATES IN PART "MINIMUM WALL THICKNESS FOR FABRICATED ASSEMBLIES AS FINALLY FABRICATED SHALL BE AT LEAST 0.87 1/2% OF THE NOMINAL WALL THICKNESS FOR PIPE SPECIFIED BY NOMINAL WALL." SPECIFICATION M-4E1 REV 15 SHEET 22 DESIGNATES 2 1/2" THICK 10" CLASS 110S PIPE AS SCH 40. A MINIMUM WALL THICKNESS VIOLATION EXISTS ON SPOOL OHBC- 8 S-657-38-1. THE VIOLATION IS 4" ABOVE FIELD WELD 10				24. DISPOSITION CONCURRENCE		
17. REPORTED BY Michael K. Wood May 16, 1979				18. VALIDATED BY P.S. Buehler 5/28/79		
21. ROUTING: (X) TO FIELD ENGINEERING () TO OTHERS (SPECIFY)				25. DISPOSITION RESULTS 2/19/80		
22. () Field Engineering Disposition (X) Field Engineering Recommended Disposition to Project Engineering Repair X in accordance to specification ED-1.				26. DISPOSITION CONCURRENCE rework reject repair use as is J. J. Gilmartin / ATB 7/2/79 PROJECT FIELD ENGINEER DATE R. K. Gammill / ELC 6-28-79 PROJECT ENGINEER DATE W. W. Ketchum / 7/16/79 PROJECT ENGINEER DATE W. W. Ketchum / 7-12-79 AUTHORIZED INSPECTOR DATE		
23. PROJECT ENGINEERING DISPOSITION THE DEFECT MAY BE FAIRED INTO THE SURROUNDING SURFACE WITHOUT REPAIR WELDINGS IN ACCORDANCE WITH ED-1 BECAUSE THE REQUIRED WALL THICKNESS FOR THE PIPE IS 0.098", PER CALC. FM-5003-20(A) Rev 3 Pgs 7/6/79 THE AREA IN QUESTION SHOULD BE EXAMINED IN ACCORDANCE WITH ED-1 TO VERIFY THAT THE DEFECT IS NO MORE EXTENSIVE THAN FIRST INDICATED. (PER R. PAPP'S 4/5/79 AND T. BALLWEG 6/22/79 OF PROT. ENG).				26. DISPOSITION RESULTS SPOOL OHBC-78-S-657-38-1 HAS BEEN REPAIRED IN ACCORDANCE TO SPECIFICATION ED-1 AND MEETS REQUIREMENTS OF M-204 REV 15 FOR MINIMUM WALL THICKNESS. VERIFIED WITH PT REPORT # 9150 AND IS ACCEPTABLE PER P. T. Furbush 2/17/80 BLOCK 23 DISPOSITION. J. J. Gilmartin 2-15-80 26. DISPOSITION RESULTS ACCEPTANCE P. T. Furbush 2-15-80 DATE J. O. Bruffen 2/15/80 AUTHORIZED INSPECTOR DATE		

Work is continued.

At the 7:10 position on the pipe, the size of the violation is 4" x 7/16" x 0.050" deep. The depth was measured in pit gage BPC-M209. The gage was calibrated 3-15-79 and is due for calibration 9-15-79. Nominal wall thickness for 3" IRC SCH 40 pipe is 0.216"; 8 1/2% CF 0.216" is 0.189" and 0.216" minus 0.050" is 0.166".

Q LIST NUMBER 4.572.

ONE QC HOLD TAG APPLIED.

QUALITY ACTION REQUEST

cc: J. Corley
D. Miller
W. Bird

AI H-96

From:	R. Sevo		①
To:	L. Curtis	Control Document ref.: 50.54(f) Ques. 23 Subs.3.5	QAR Ident. No.: SD-311
Action Requested:	Subsection 3.5 of 50.54(f) addresses specific deficiency description of		
	inadequate design coordination in the design of the electrical duct bank and		
	the root cause was detailed as failure of the drawings to provide Construction		
	with the information necessary to prevent interference. The corrective action		
	(generic) stated this condition is not considered generic but rather an		
	anomaly unique to electrical duct banks.		
	On January 18, 1980, the Client issued NCR M-01-4-0-005 which identified		
	Diesel Generator fuel lines not inspected during backfilling operations because		
	Drawing C-130 was not referenced as inspection criteria on the compacted		
	backfill plan. Part corrective action required and accomplished cross-		
Signature:	<i>R.E. Sevo</i>	Date:	2/27/80
		Reply Requested by:	April 30, 1980
Reply:	The following response has been provided by Project Engineering.		
	All drawing revisions issued during the month of March, 1980 according to the		
	CEBUS (drawing control log) were surveyed to determine the adequacy of		
	interdiscipline interface coordination with the matrix shown in table 1 of		
	EDPI 4.25.1 as standard.		
	Our findings indicate that improvements in design interface coordination		
	within the project are required.		
	Part of the problem is in the definition of the term "reviewed" in the		
	(continued)		
Signature:	IOM dated June 16, 1980; Curtis to Dreisbach, signed by V.J.Manta for L. H. Curtis	Date:	6/16/80
Action Verified:	<i>R.E. Sevo</i>	Date:	7/14/80

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QUALITY ACTION REQUEST

QAR SD-311

QA AI H-96

R. Sevo to L. Curtis

Page 2.

ACTION REQUESTED (continued):

referencing of fuel lines on Dwg. C-130, also drawing M-830 was revised by FCR M-2472 to add a typical detail for pipe passing through an electrical duct bank.

The two instances identified above indicate a repetitive concern relative to inter discipline interfacing on drawings. The second instance resulted in lack of Quality Control inspection of fuel lines and will continue to be bypassed because a mechanical drawing detail (FCR M-2472) will not be identified on a civil related compacted backfill inspection plan, without a positive method of interfacing such criteria from other discipline drawings. It is requested that Project Engineering reevaluate the design coordination effort for adequacy in all disciplines to prevent recurrence of these identified deficiencies.

REPLY (Continued)

following quote from EDPI 4.25.1:

"Some personnel have interpreted the work 'reviewed' to mean those who reviewed and approved the document by signing in the title block. Another, broader, interpretation is that the word 'reviewed' in the context of EDPI 4.25.1 is intended to include coordination. Resolution of this matter is being sought from the Manager of Engineering and his staff. Resolution of this definition question is scheduled to be completed and documented by June 30, 1980, after which time any further corrective action which may be necessary will be taken."

(QA NOTE: EDPI 4.25.1 has been resolved by changes included in Revision 8, dated June 16, 1980.)

"As for present corrective action, all group supervisors were instructed to adhere to the requirements of EDPI 4.25.1 (Attachment 1).

(continued)

The phrase 'design document change' applies to drawing revisions, DCNs, specification revisions, SCNs, FCNs, and supplier document revisions. This list was obtained from the listing of Category I records which are issued for implementation of design as described in EDP 5.32, Engineering Records Management, Revision 7.

Upon investigation, it has been found that the 'root' of the coordination requirement lies within 10 CFR 50 Appendix B, Criteria VI, Document Control. This criteria reads as follows:

'Changes to documents shall be reviewed and approved by the same organizations that performed the original review and approval.'

The requirement that changes to design documents be distributed to all groups and organizations that received the original document is based upon the following quality standard.

1. ANSI N45.2.11-1974

- a) Section 8: 'Information concerning the change is transmitted to all affected persons and organizations.'

On project, the distribution requirement is implemented through the Master Distribution Schedule (EDP 5.25), Part 5 for MRs and specification, Part 4, Print Distribution for approved Bechtel drawings and Part 3, Supplier Document Distribution Schedule.

Group supervisors are expected to convey the subject requirement to all originators of design changes within their group and to ensure that the coordination requirements in EDPI 4.25.1 are followed.

As for present corrective action, all group supervisors were instructed to adhere to the requirements of EDPI 4.25.1 (Attachment 1). As to the coordination of drawing C-130, civil group's response is detailed in Attachment 2.

Attachment 1 provides engineering direction from the Project Engineer to all Group Supervisors pertaining to coordination of design document changes as further detailed.

"This memorandum is written in response to questions raised by some group supervisors regarding the following statement in EDPI 4.25.1, Design Interface Control (Internal) Revision 7:

'4.2 It is the responsibility of the originator of a design document change to effect coordination of the change with all groups which reviewed and/or used the original or subsequent revisions of that design document'.

As mentioned in our project engineering team meeting on May 12, 1980, a proposed revision to the above paragraph is in process (due for issuance June 1, 1980) which will delete the words 'and/or used' above. Thus, coordination of proposed design changes with groups solely because they have used the original or subsequent revisions of that document will no longer be required. However, this does not preclude adherence to the matrix included as Table I in EDPI 4.25.1 which defines the requirements for interface coordination among other design groups that may be impacted by the new or changed design documents. (Reference: EDPI 4.25.1 Section 3.0). Nor does this relieve the requirement that design documents when issued, be distributed to those groups and organizations which received the original or subsequent revisions of the design document.

QAR SD-311
Page 5.
REPLY (Continued)

The following response identified as Attachment 2 provides Project Engineering (civil) analysis as related to client NCR M-01-4-0-005 and is the civil group's response to the subject QAR.

"Civil group has reviewed drawings pertaining to the underground piping for design interface and coordination with other disciplines. The diesel oil fuel lines were referenced on Drawing 7220-C-130(Q) in response to verbal requests from quality assurance and quality engineering. Civil drawings are considered to have adequate design interface and contain sufficient instructions even without referencing any piping on Drawing 7220-C-130(Q) for the following reasons.

Drawings 7220-C-130, C-83, C-93, C-51, C-52, etc. cross reference mechanical, plant design, control systems and electrical drawings, material requisitions and specifications as required.

It is not clear why Drawing 7220-C-130(Q) was not included in the quality control inspection plans. Drawing 7220-C-130(Q) references Drawing 7220-C-4 for general notes and contained underground piping sections and details. The pipes in the yard are laid out on detailed area plans. Drawing 7220-C-4 (Note 7) specifically calls for detail 5 on Drawing 7220-C-130(Q) for trenching and backfilling Q-listed piping. Note 4 on Drawing 7220-C-4 draws attention to mechanical and electrical drawings for mechanical yard piping and electrical ductbank routings. The trenching and backfilling schedule on Drawing 7220-C-130(Q) indicates that pipe purchased under Material Requisitions 7220-M-104A and C-67 is to be Q-listed and references appropriate installation detail.

QAR SD-311

Page 6.

REPLY (Continued)

"It should be noted that piping for diesel oil was to be purchased, routed, and installed by field construction. These lines are considered Q-listed and installation requirements are referenced via Drawings 7220-C-4 and C-130(Q). The interferences during installation, such as crossing an electrical ductbank, other piping and objects and/or additional information, details, etc., when required, are clarified and obtained by means of field change requests (FCRs). Such FCRs are coordinated among the affected disciplines.

Based on the above, it is our conclusion that adequate design interface and coordination exists between civil group and other disciplines.

QUALITY ACTION
REQUEST

J. Corley
D. Miller
W. Bird

AI: H-106

From: L. A. Dreisbach		①	
To: W. L. Barclay	② Control Documents: Spec.'s M-204 Rev. 12, M-481 Rev. 17	③ QAR Ident. No.: SD-320	④
Action Requested: M/R M-127 Rev. 19		⑤	
<p>During a routine monitor on five (5) installed small valves, the following was noted: QCIR's P-130-FSK-DVI-M619-4-2, and 3, Log #'s 39191 and 39193 respectively show all five drain valves identified as 1"-EBC-GB Types. This corresponds to the P & ID drawings, the FSK drawings and spec. M-481 class sheets. (1) All five field installations show valves were upgraded to 1" EBB-YGB Types. Spec. M-481 Rev. 17 page 5 item 19 states that valve class can be upgraded but does not mention a change in valve type. In either case the identification change is not reflected in the permanent Q.C. records. (2) One of the five valves (conn #10) was missing it's I.D. Tag altogether. (CONTINUED ON PAGE 2 of 2 - Issue)</p>			
Signature: <i>L.P. Carhead</i>	⑥ Date: 3/26/80	⑦ Recv Requested by:	⑧ 4/26/80
Reply: Item 1: IOM QCFM 8097/AI-885 from E. D. Newman to L. A. Dreisbach, states in part: "Drawing M-481 Rev. 17 Note #17 allows substitution of higher class valves. As the final "as built" drawings do not require the type of globe valve, there is no reason for QC documents to specify the type or class. QC does identify valves uniquely by serial numbers on the QCIR's. These were correct in this case."			
Item 2: IOM QCFM 8097/AI-885 states in part: "Field Engineering was notified of the missing vendor's Identification Tag, and the tag has been replaced."			
(REPLY CONTINUED ON PAGE 2 OF 2)			
Signature: SIGNATURE ON ABOVE REFERENCED IOM		⑩ Date:	⑪
Action Verified: <i>John W. Croz</i>		⑫ Date: 7/18/80	⑬

2/2/74

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W. L. Barclay
QAR SD-320 Action Item-H-106
Page 2 of 2 - Issue

Quality Action Requested:

1. Q.C. to initiate action per PSP 3.2 to resolve above concern.
2. Replace I. D. Tag on conn #10 shown on drawing FSK-DVI-M-619-4 Rev. 5.
3. Review all completed P-130 QCIR's against the installed condition and verify correctiveness. (i.e. Type, Identification)
4. Reinstruct personnel in this matter.

REPLY (Continued)

Ref. IOM from F. P. Carchedi to W. L. Barclay, 3/28/80, Supplementary info on QAR SD-320, AI H-106, states in part that Specification M-204 Rev. 12 Section 5.23, para. 6 requires "P" letter on valves.

Item 3: IOM QCFM 8097/AI-885 states in part: "SCN No. 25 to M-204 Rev. 12 . . .

Resolved that it was not necessary that these valves be identified with P."

Ref. QA Action Item H-106.

Item 4: IOM QCFM 8097/AI-885, states in part: "As none of the above items affected the Quality Control Program or resulted from Quality Control errors, no PSP 3.2 action, QCIR review, or reinstruction is necessary."

REPORT OF NONCONFORMITY

1. JOB NUMBER CL-238	2. UNIT NUMBER Unit #1	3. DATE 7-10-80	4. ITEM NAME Surveillance Specimen Holder Tube	5. ITEM NUMBER 27-A40
6. VENDOR/MANUFACTURER Babcock & Wilcox	7. DISCOVERED DURING <input type="checkbox"/> RECEIVING <input type="checkbox"/> TEST <input checked="" type="checkbox"/> CONST.	8. REJECT TAG NUMBER 428	9. PROCEDURE NUMBER FCP #97	
10. SPECIFICATION NUMBER N/A	11. DRAWING NUMBER 238856E, Rev. 2	12. PRIOR REPORT OF NONCONFORMITY: N/A		
13. DESCRIPTION OF NONCONFORMITY After machining the flats for SSHT shims, the dimension from centerline of layout to far side of flat is 4 5/8". The Dwg. 238856E, Rev. 2 calls for a minimum dimension of 4 3/4".				
14. REPORTED BY <u>R.O. Brown</u> NAME 7-10-80 DATE	15. VERIFIED BY <u>R.W. Shupe</u> NAME 7-10-80 DATE	16. CORRECTIVE ACTION REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <u>H. J. Linn</u> FIELD PROJECT ENGINEER 7-10-80 DATE				
18. RECOMMENDED DISPOSITION: <input type="checkbox"/> N/A <input type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
19. TECHNICAL JUSTIFICATION/OR RECOMMENDED DISPOSITION INSTRUCTIONS Vendor to advise. <u>H. J. Linn</u> FIELD PROJECT ENGINEER 7-10-80 DATE				
20. ACTUAL DISPOSITION: <input type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> ACCEPT AS IS				
21. DISPOSITION INSTRUCTIONS Accept as is. See SPR-163 for rationale. <u>H. J. Linn</u> FIELD PROJECT ENGINEER 7-25-80 DATE				
22. APPROVALS B&W FQC <u>R.W. Shupe</u> 7-25-80 SIGNATURE DATE OWNER/AGENT _____ SIGNATURE DATE			23. ANI REVIEW OTHER SIGNATURE DATE OTHER SIGNATURE DATE SIGNATURE DATE	
24. DISPOSITION COMPLETED NAME DATE	25. DISPOSITION VERIFICATION <input type="checkbox"/> ACCEPTABLE <input type="checkbox"/> UNACCEPTABLE NAME DATE REPORT OF NONCONFORMITY :			
25. CORRECTIVE ACTION				
27. NONCONFORMITY CLOSED FIELD PROJECT MANAGER DATE FIELD QUALITY CONTROL SUPV. DATE				

BADCOCK & WILCOX
SITE PROBLEM REPORT

TITLE (MAX. 30 CHARACTERS) SSHT/INTERNAL		PRIORITY 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> NONE <input type="checkbox"/>	
CUSTOMER CONSUMERS POWER CO		LEAD MANAGER, J. W. Mitchem	
SUPPLIER B&W		DOC. ID 13	HSS NO. 12
PA NO.		SPR NO. 163	REV. NO. 0
CHARGE NO.	HR. BUDGET	PART NO./TGS. NO. 620-0012-60 01-001	

DESCRIPTION OF PROBLEM

SEE ITEM # 13 OF NCR.

W. J. LEE

JUL 24 1980

B & W

B&W NCR # 1740

ORIGINATOR

H. A. GUETLING

DATE

7/10/80

STATUS ACTION TO DATE, INCLUDING PERSONS CONTACTED:

L. D. CLINE - NPGID, LYNCHBURG

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL:

VENDOR TO SUPPLY RESOLUTION.
NOTE: SHIM DOESN'T NEED ANY MORE THAN 4 5/8".

RESOLUTION

ACCEPT THE 4 5/8" DIMENSION "AS IS", THIS WILL NOT AFFECT FUNCTION, FIT-UP OR STRUCTURAL INTEGRITY OF SSHT MOUNTING.

INFORMATION ONLY

POTENTIAL CROSS-CONTRACT APPLICABILITY

YES NO

POTENTIAL SAFETY CONCERN

YES NO

RESOLUTION DOCUMENT NO.

RESOLUTION PREPARED BY **SWK** DATE **7/16/80**

REVIEWED BY **W. J. Lee** DATE **7/16/80**

APPROVED BY **D. J. Gould** DATE **7/17/80**

CLOSED OUT BY _____ DATE _____

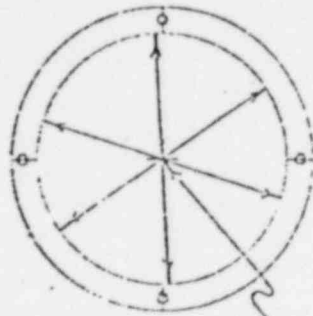
SPR CLOSEOUT REPORT:

REPORT OF NONCONFORMITY

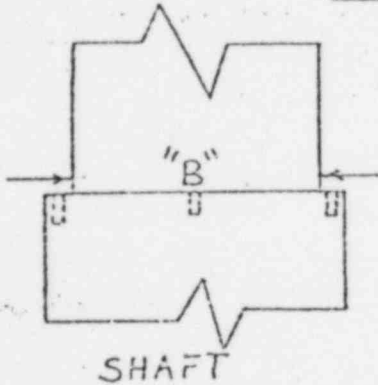
1. JOB NUMBER CL-238	2. UNIT NUMBER Unit #1	3. DATE 7-10-80	4. ITEM NAME Surveillance Specimen Holder Tube	5. ITEM NUMBER 27-A40
6. VENDOR MANUFACTURER Babcock & Wilcox	7. DISCOVERED DURING <input type="checkbox"/> RECEIVING <input type="checkbox"/> TEST <input checked="" type="checkbox"/> CONST.	8. REJECT TAG NUMBER 428	9. PROCEDURE NUMBER FCP 297	
10. SPECIFICATION NUMBER N/A	11. DRAWING NUMBER 238856E, Rev. 2	12. PRIOR REPORT OF NONCONFORMITY N/A		
13. DESCRIPTION OF NONCONFORMITY After machining the flats for SSHT shims, the dimension from centerline of layout to far side of flat is 4 5/8". The Dwg. 238856E, Rev. 2 calls for a minimum dimension of 4 1/4".				
14. REPORTED BY <u>R.O. Brown</u> NAME 7-10-80 DATE	15. VERIFIED BY <u>R.W. Myers</u> NAME 7-10-80 DATE		16. CORRECTIVE ACTION REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <u>[Signature]</u> FIELD PROJECT ENGINEER 7-10-80 DATE				
18. RECOMMENDED DISPOSITION: <input type="checkbox"/> N/A <input type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS Vendor to advise. <u>[Signature]</u> FIELD PROJECT ENGINEER 7-10-80 DATE				
20. ACTUAL DISPOSITION: <input type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
21. DISPOS. ON INSTRUCTIONS <u>[Signature]</u> FIELD PROJECT ENGINEER DATE				
22. APPROVALS B&W FOR SIGNATURE _____ DATE _____ OWNER AGENT SIGNATURE _____ DATE _____			23. ANI REVIEW OTHER SIGNATURE _____ DATE _____ SIGNATURE _____ DATE _____	
24. DISPOSITION COMPLETED NAME _____ DATE _____		25. DISPOSITION VERIFICATION <input type="checkbox"/> ACCEPTABLE <input type="checkbox"/> UNACCEPTABLE NAME _____ DATE _____ REPORT OF NONCONFORMITY # _____		
26. CORRECTIVE ACTION				

REPORT OF NONCONFORMITY

JOB NUMBER CL 238	UNIT NUMBER UNIT # 1	DATE 7-28-80	REPORT OF NONCONFORMITY # 1741
-----------------------------	--------------------------------	------------------------	--



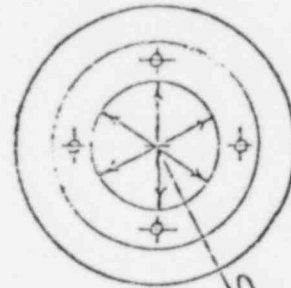
DIM. "B"



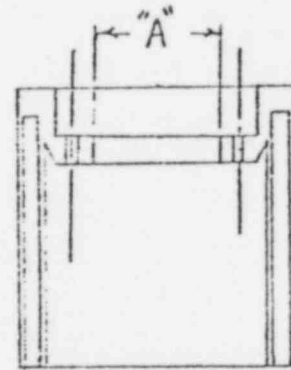
SHAFT

DIM. "B" TAKEN $\frac{1}{2}$ " ABOVE BOLTING SURFACE

7.764"
7.763"
7.763"
7.760"
7.760"
7.761"



DIM. "A"



BAFFLE

DIM. "A" TAKEN SAME AS "B"

7.761"
7.762"
7.763"
7.761"
7.759"
7.761"

REPORT OF NONCONFORMITY

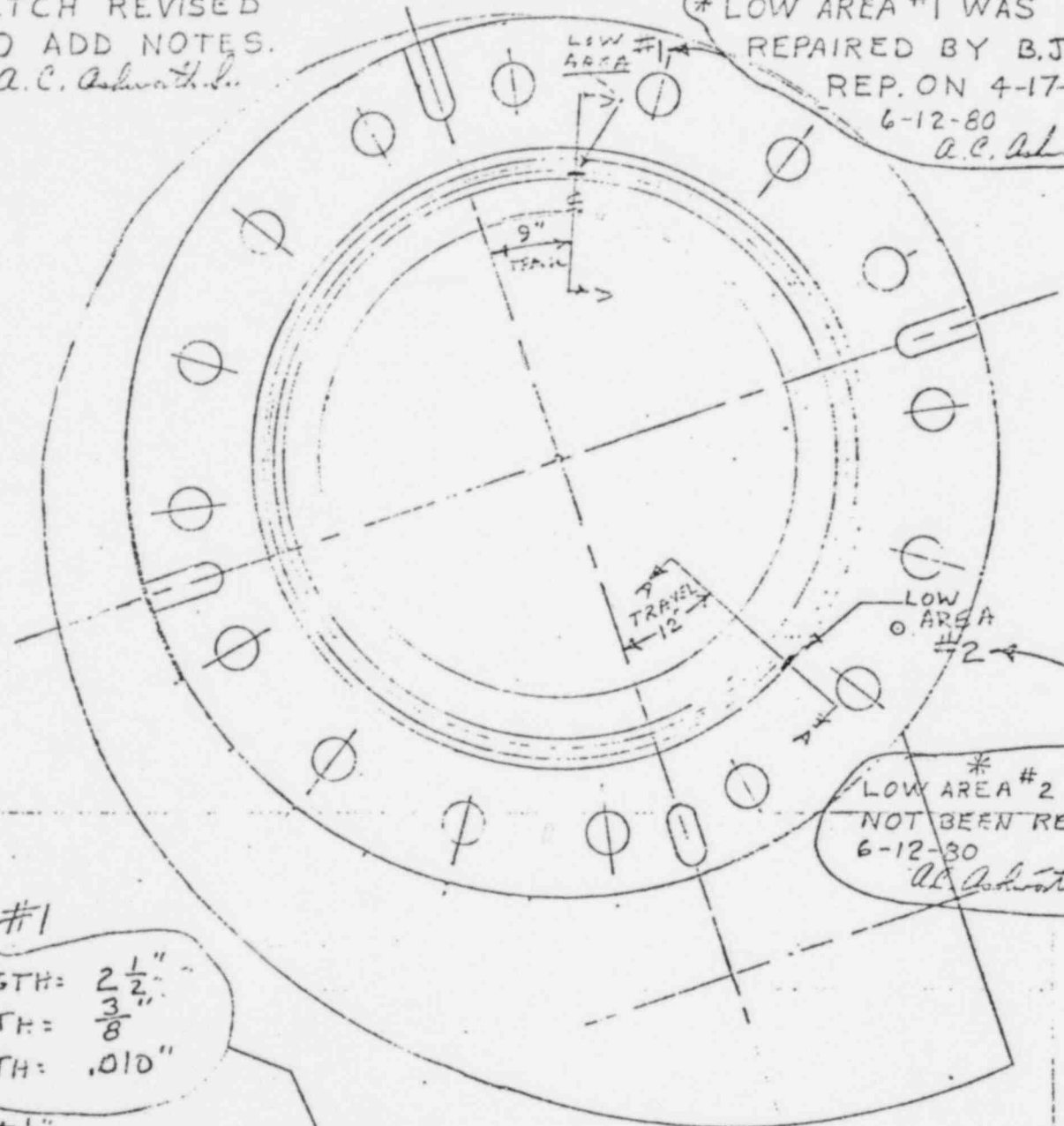
1. JOB NUMBER CL-238	2. UNIT NUMBER 1	3. DATE 11-7-79	4. ITEM NAME RC Pump Casing	5. ITEM NUMBER IP51D
6. VENDOR MANUFACTURER Byron Jackson	7. DISCOVERED DURING <input type="checkbox"/> RECEIVING <input type="checkbox"/> TEST <input checked="" type="checkbox"/> CONST.	8. REJECT TAG NUMBER #341	9. PROCEDURE NUMBER FCP 131 Seq.	
10. SPECIFICATION NUMBER FS III.3	11. DRAWING NUMBER 1F7623 Rev. K	12. PRIOR REPORT OF NONCONFORMITY: N/A		
13. DESCRIPTION OF NONCONFORMITY Several high and low areas are present in the gasket grooves of the pump casing. See attached sketch for details. 4-1-80 { See Page 3 of 3 for additional low areas discovered during repairs of low part { areas on Page 2.				
14. REPORTED BY <u>A.C. Ashworth</u> NAME DATE 4-16-80 <u>11-7-79</u>	15. VERIFIED BY <u>R.W. Shyne</u> NAME DATE 4-16-80 <u>11-7-79</u>	16. CORRECTIVE ACTION REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <u>H.M. Linn</u> 4-16-80 FIELD PROJECT ENGINEER DATE <u>11-7-79</u>				
18. RECOMMENDED DISPOSITION: <input type="checkbox"/> N/A <input type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS Vendor to supply disposition. <u>H.M. Linn</u> FIELD PROJECT ENGINEER DATE <u>11-13-79</u>				
20. ACTUAL DISPOSITION: <input checked="" type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
21. DISPOSITION INSTRUCTIONS Repairs are to be made by Byron Jackson with all work and documentation being checked by Consumers Power Company Q.A. Upon completion of work B&W CC to inspect and clear NCR. <u>H.M. Linn</u> 4-9-80 FIELD PROJECT ENGINEER DATE <u>H.M. Linn</u> 4-16-80				
22. APPROVALS B&W FOC <u>R.W. Shyne</u> 4-9-80 SIGNATURE DATE OWNER AGENT <u>R.W. Shyne</u> 4/10/80 SIGNATURE DATE <u>R.W. Shyne</u> 4/15/80 SIGNATURE DATE			23. QAI REVIEW <u>R. Shyne</u> 4/15/80 SIGNATURE DATE <u>R. Shyne</u> 4/22/80 SIGNATURE DATE	
24. DISPOSITION COMPLETED <u>A.C. Ashworth</u> 7-14-80 NAME DATE	25. DISPOSITION VERIFICATION <u>R.W. Shyne</u> 7-14-80 NAME DATE <input checked="" type="checkbox"/> ACCEPTABLE <input type="checkbox"/> UNACCEPTABLE REPORT OF NONCONFORMITY #			
25. CORRECTIVE ACTION				
FIELD PROJECT MANAGER				DATE
27. NONCONFORMITY CLOSED <u>R.W. Shyne</u> FIELD QUALITY CONTROL SUPV.		DATE <u>7-14-80</u>		

REPORT OF NONCONFORMITY

JOB NUMBER CL-238	UNIT NUMBER #1 R.C. PUMP CASING	DATE 4-16-80	REPORT OF NONCONFORMITY # 1688
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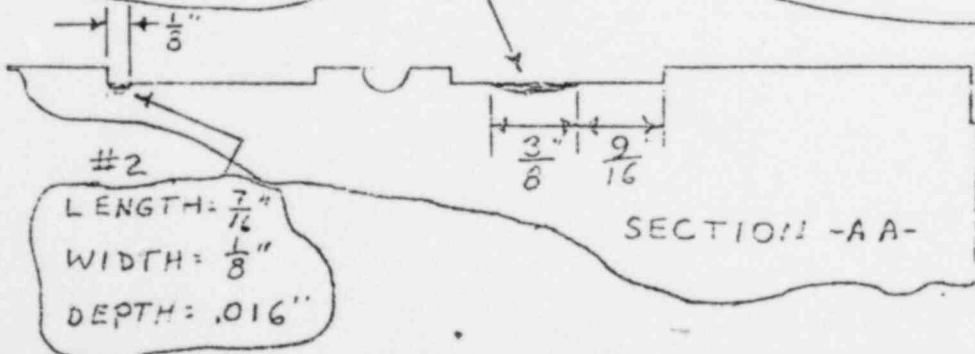
* THIS SKETCH REVISED
6-12-80 TO ADD NOTES.
6-12-80 A.C. Ashworth

* LOW AREA #1 WAS
REPAIRED BY B.J.
REP. ON 4-17-80.
6-12-80
A.C. Ashworth



* LOW AREA #2 HAS
NOT BEEN REPAIRED
6-12-80
A.C. Ashworth

#1
LENGTH: $2\frac{1}{2}$ "
WIDTH: $\frac{3}{8}$ "
DEPTH: .010"



#2
LENGTH: $\frac{7}{16}$ "
WIDTH: $\frac{1}{8}$ "
DEPTH: .016"

ADD TO NCR #1688

THESE LOW AREAS WERE DISCOVERED DURING
INSPECTION OF REPAIRS MADE TO PREVIOUSLY
REPORTED DISCONTINUITIES ON ORIGINAL NCR.

A.C. Ashworth
B&W CO. Q.C.

REPORT OF NONCONFORMITY

1. JOB NUMBER CL-238	2. UNIT NUMBER Unit #2	3. DATE 1-4-80	4. ITEM NAME Restraints	5. ITEM NUMBER N/A
6. VENDOR MANUFACTURER Bechtel	7. DISCOVERED DURING <input type="checkbox"/> RECEIVING <input type="checkbox"/> TEST <input checked="" type="checkbox"/> CONST.	8. REJECT TAG NUMBER 494	9. PROCEDURE NUMBER FCP #29	
10. SPECIFICATION NUMBER FCP	11. DRAWING NUMBER E-40	12. PRIOR REPORT OF NONCONFORMITY N/A		
13. DESCRIPTION OF NONCONFORMITY Seq. 265 U.T. examine 2-9A-1 in weld area has been bypassed. Mark number 2-9A-1 has been welded in this area and ut cannot be performed.				
14. REPORTED BY <u>W.A. Willman</u> <u>1-4-80</u> NAME DATE		15. VERIFIED BY <u>R.W. Shyne</u> <u>1-4-80</u> NAME DATE		15. CORRECTIVE ACTION REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <u>H. J. Linn</u> <u>1-4-80</u> FIELD PROJECT ENGINEER DATE				
18. RECOMMENDED DISPOSITION: <input type="checkbox"/> N/A <input checked="" type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
19. TECHNICAL JUSTIFICATION /OR RECOMMENDED DISPOSITION INSTRUCTIONS NDE examine 2-9A-1 in accordance with 9-UT-105 (angle beam UT) If no indications exist, accept as is. If indications exist, repair in accordance with FCP 29. Vendor to approve disposition. <u>H. J. Linn</u> <u>1-9-80</u> FIELD PROJECT ENGINEER DATE				
20. ACTUAL DISPOSITION: <input checked="" type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
21. DISPOSITION INSTRUCTIONS See RFI 270, REM C-2544, FER 1-14-80 NDE examine 2-9A-1 in accordance with 9-UT-105 (angle beam UT) If no indications exist, accept as is. If indications exist, repair in accordance with FCP 29. <u>H. J. Linn</u> <u>2-8-80</u> FIELD PROJECT ENGINEER DATE				
22. APPROVALS B&W FOC <u>R.W. Shyne</u> <u>2-8-80</u> OTHER _____ SIGNATURE DATE SIGNATURE DATE OWNER AGENT <u>R.E. Whitaker</u> <u>2/12/80</u> OTHER _____ SIGNATURE DATE SIGNATURE DATE			23. ANI REVIEW <u>C. Auger</u> <u>2-12-80</u> SIGNATURE DATE	
24. DISPOSITION COMPLETED <u>A.L. [Signature]</u> <u>6-27-80</u> NAME DATE		25. DISPOSITION VERIFICATION <input checked="" type="checkbox"/> ACCEPTABLE <input type="checkbox"/> UNACCEPTABLE <u>R.W. Shyne</u> <u>6-27-80</u> REPORT OF NONCONFORMITY # NAME DATE		
25. CORRECTIVE ACTION A meeting will be held advising Field Superintendants not to skip over QC sequences. <u>V. N. Argentean</u> <u>2/14/80</u> FIELD PROJECT MANAGER DATE				
27. NONCONFORMITY CLOSED <u>R.W. Shyne</u> <u>7-16-80</u> FIELD QUALITY CONTROL SUPV. DATE				

NO. 7220-M-1A

S/C NO.

CL-238

Q-Related NO. Date 1-9-80

270

DWG. OR SPEC.

SHEET

REV.

TITLE

7220-C-233 (Q)

--

18

Purchase of Misc. Metal

PREPARED BY:
W.G. Linn

W.G. Linn

RESPONSE
REQUESTED BY DATE

EXISTING CONDITION:

7220-C-233 (Q) section 8.4 and B&W FCP #29 has been violated.
See NCR 1706.

REQUESTED INFORMATION:

Is recommended disposition as stated in block 19 of NCR 1706 acceptable?

RESPONSE:

Yes. See ATTACHED RETM C-2344.

Reviewed by:

Date Response prepared by: *Paul D. [Signature]*

W.G. Linn

2/4/80

Bechtel Approval:

[Signature]

SUBCONTRACTOR TO COMPLETE

BECHTEL TO COMPLETE

MIDLAND PROJECT

RESIDENT ENGINEER MEMORANDUM

RE- C-2544

DATE 2-4-59

R.O. #2 UT To Be Performed After

SUBJECT: Welding on Cold Leg Leg

REF: FER CC-100, P. GARDNER, 1-17-59

AAO COORDINATION: Date 2-1-59 / Time --- / AAO Contact Dill Haggerson

PROJECT ENGINEERING HAS REVIEWED THE REFERENCED
FER AND HAS FOUND IT ACCEPTABLE TO UT THE COLD LEG LEG
GROUP AFTER WELDING AS REQ'D AND THEN REPAIR ANY INDICATIONS
THAT NEED IT.

UNCONTROLLED
NOT TO BE USED
FOR CONSTRUCTION

RESIDENT ENGINEER John W. Dooly

AAO Review: Group Supervisor _____

Date: _____

FILE ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOB 7220

DATE 1/14/80

PAGE 7 OF 1

WITH ATTACHMENTS

ACTION REQUIRED/TAKEN

ITEM NO

INSPECTION DESCRIPTION

FER CC-106

B&W NCR 1706

AS STATED ON THE ATTACHED
 REF #270 AND B&W NCR #1706,
 ON ONE OF THE COLD LEG LUG
 TO EMBED WELDS IN UNIT 2 THERE
 WAS NO UT PERFORMED ON THE
 EMBED PRIOR TO WELDING. B&W
 WANTS TO UT AFTER WELDING
 AS REQUIRED AND THEN REPAIR
 ANY INDICATIONS THAT NEED IT.

SEEK REM
 APPROVING B&W'S
 RECOMMENDED
 DISPOSITION.

Approved Via REM C-254
 John W. Darby 2-4-80

REMARKS:

cc: R. Schumann

Paul [Signature]
 SIGNATURE

ROUTE

J. BETTS

J. TOAL (FILE)

FILE CREAT.

ULTRASONIC INSPECTION REPORT

MCR-1706
FCP 29, UNIT #2

JOB NUMBER CL-238 DATE 5-14-80
 WELD NUMBER W29-15 W29-16 SYSTEM NUMBER Reactor Coolant Restraint
 WELD REPAIR NUMBER N/A
 UT PROCEDURE NUMBER 9UT-105

INSPECTION LEVEL		MATERIAL TYPE & SURFACE CONDITION	APPLICABLE CODE
WELD <input type="checkbox"/> FINAL <input type="checkbox"/> REPAIR <input type="checkbox"/> THICKNESS <input type="checkbox"/> OTHER _____ CLAD <input type="checkbox"/> BOND <input type="checkbox"/> OTHER _____	BASE METAL <input checked="" type="checkbox"/> FLAW DETECTION <input type="checkbox"/> THICKNESS <input type="checkbox"/> OTHER _____	<input type="checkbox"/> MATERIAL TYPE <u>C/S</u> <input type="checkbox"/> AS WELDED <u>A-36</u> <input checked="" type="checkbox"/> GROUND <input type="checkbox"/> MACHINED	<input type="checkbox"/> ASME I <input checked="" type="checkbox"/> ASME III <input type="checkbox"/> ASME VIII <input type="checkbox"/> B 31.1 <input checked="" type="checkbox"/> OTHER <u>BPC-C-233</u>

INSTRUMENT	TRANSDUCER
MAKE <u>Kraut Kramer</u> MODEL <u>USM2</u> SERIAL NO. <u>808266</u> CALIBRATION DATE <u>Due 10/7/80</u> CALIBRATION BLOCK SN. NO. <u>001</u>	TYPE <u>Aretech Gamma</u> SIZE <u>1" x 1" B23858</u> FREQ. <u>2.25 mhz.</u> BEAM ANGLE <u>45°</u> COUPLANT <u>Exoson #30</u> BATCH NO. <u>06292930</u>

IDENTIFICATION & OR PART NO.	AREA	ACCEPT	REJECT	LENGTH	DEPTH	BACK REFLECTION	MAX. SIG.	WALL THICKNESS		WALL THICKNESS DIMENSIONS	
								NO.	INCHES	NO.	INCHES

WELD NO.	ACCEPT	REMARKS	SKETCH
W29-15	✓	Due to Geometrical conditions only two of three sides of existing welds have been UT'ed.	
W29-16	✓		

Calibrated per 9UT-105
 Time; Start 8:30 A.M.
 Re-cal. 10:30 P.M.
 Finish 3:00 P.M.

INSPECTOR Jay Braun
 CERTIFIED LEVEL II

Following is a list of attendees for a meeting held this date 7-15-80
to discuss corrective action for CPCo Reports of Nonconformity #M-03-4-0-004
and #M-03-4-0-044. See attached letter for items discussed during
meeting. Also discussed corrective action for B&WCC nonconformance reports
1711 and 1724.

Personnel in attendance:

<i>H Landis</i>	7-15-80
<i>Ed Ballenger</i>	7-15-80
<i>A.C. Ashworth</i>	7-15-80
<i>R.D. Brown</i>	7-15-80
<i>R. Jain</i>	7-15-80
<i>C.H. Cutler</i>	7-15-80
<i>[unclear]</i>	7-15-80
<i>H.H. [unclear]</i>	7-15-80
<i>[unclear]</i>	7-15-80
<i>R.W. Shope</i>	7-15-80
<i>J.S. Turner</i>	7-15-80
<i>Walter [unclear]</i>	7-15-80

Babcock & Wilcox

B&W Construction Company

June 11, 1980

Copley, Ohio 44321

Telephone: (216) 665-8341

Bechtel Power Corporation
P. O. Box 2167
Midland, MI 48640

Attention: L. E. Davis

SUBJECT: Subcontract 7220-M-1A
NSSS Erection

SERIAL: M-1A-(P)-616

Dear Mr. Davis:

Following is our response to CPCo NCR #M-03-4-0-044 and letter #146FQA80, please transmit to CPCo Quality Assurance.

A meeting will be held with B&WCC Supervision and Q.C. personnel to discuss CPCo Nonconformance Reports M-03-4-0-004 and M-03-4-0-044 (both of which deals with failure to follow Field Construction Procedures).

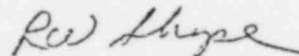
Items to be discussed during this meeting shall include the following:

1. Requirements of B&WCC Quality Assurance Policy 9-QA-05 and Quality Control Procedure 9-QPP-102 to have and follow Field Construction Procedures.
2. To continually review procedures during work activities in order to be aware of changes as they occur.
3. Instruct Quality Control personnel to enforce the procedure requirements.

In addition, we shall also use the above requirements as a topic for a Safety/Q.C. Indoctrination meeting which is presented to the craft personnel.

If you have any questions concerning the above, please contact me.

Very truly yours,



R. W. Shope

RWS/jlj

cc: W. J. Lee
V. N. Asgaonkar
C. D. Thompson
J. L. Corley - CPCo
File

REPORT OF NONCONFORMITY

1. JOB NUMBER CL-238	2. UNIT NUMBER Unit #2	3. DATE 01/29/80	4. ITEM NAME Pipe Restraint	5. ITEM NUMBER PR-21
6. VENDOR MANUFACTURER Chicago Bridge and Iron		7. DISCOVERED DURING <input type="checkbox"/> RECEIVING <input type="checkbox"/> TEST <input checked="" type="checkbox"/> CONST.	8. REJECT TAG NUMBER 413	9. PROCEDURE NUMBER FCP #72
10. SPECIFICATION NUMBER N/A		11. DRAWING NUMBER C487 & CB&I 427		12. PRIOR REPORT OF NONCONFORMITY# None
13. DESCRIPTION OF NONCONFORMITY Pipe Restraint #21 of decay heat line 2CCA-18 was inspect after installation. Plan E of Pipe Restraint 30'-9"N. & 32'-0" W of reactor Bldg. E Elevation 602'-0 1/2" E Emb. location is 30'-9" N & 32'-0 W of reactor bldg E Elevation 602'-0" E of installed pipe restraint is 30'-9" N & 32'-0" W of reactor bldg E Elevation 602'-0 13/ The difference in elevation between the centerlines of the embed and the pipe restraint exceeds the 5" tolerance as set forth by Bechtel F.C.R. #C2202, copy enclosed, and violates B&W FCP #72, sequence 070, hanger and restraint installation form, and inspection point #1 and #4.				
14. REPORTED BY <u>P. Hoque by K. Carroll</u> 1-29-80 NAME DATE		15. CORRECTIVE ACTION REQUIRED <u>R. Hoque</u> 1-29-80 NAME DATE		<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <u>J. H. Linn</u> 1-29-80 FIELD PROJECT ENGINEER DATE				
18. RECOMMENDED DISPOSITION: <input type="checkbox"/> N/A <input type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
19. TECHNICAL JUSTIFICATION OF RECOMMENDED DISPOSITION INSTRUCTIONS 324 RFI Linn + 25-80 Bechte' to advise per RFI 324. <u>J. H. Linn</u> 2-11-80 FIELD PROJECT ENGINEER DATE				
20. ACTUAL DISPOSITION: <input type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> ACCEPT AS IS				
21. DISPOSITION INSTRUCTIONS Accept as is. See RFI 324, FER CC-116, REM C-2660. SEE RFI-434 <u>J. H. Linn</u> 6-23-80 FIELD PROJECT ENGINEER DATE				
22. APPROVALS B&W FCP <u>R. W. Hoque</u> 4-29-80 SIGNATURE DATE OWNER AGENT <u>R. E. Whitaker</u> 6/24/80 SIGNATURE DATE			23. XANI REVIEW <u>fisher</u> 6/24/80 SIGNATURE DATE	
24. DISPOSITION COMPLETED <u>R. W. Hoque</u> 6-25-80 NAME DATE		25. DISPOSITION VERIFICATION <input checked="" type="checkbox"/> ACCEPTABLE <input type="checkbox"/> UNACCEPTABLE <u>R. W. Hoque</u> 6-25-80 NAME DATE REPORT OF NONCONFORMITY #		
26. CORRECTIVE ACTION A letter will be written advising Field Superintendents as to the necessity of installing to the tolerances as stated in the Field Construction Procedures. <u>V. N. Arghwan</u> 4/27/80 FIELD PROJECT MANAGER DATE				
27. NONCONFORMITY CLOSED <u>R. E. Whitaker</u> 7-18-80 FIELD QUALITY CONTROL SUPV. DATE				

7220-M-1A

S/C NO. CL-238

O-Related NO Date 2-18-80

J. OR SPEC.

SHEET

REV.

TITLE

C-487

7

5

Pipe Restraint 2-611-2-21
Decay Heat Unit #2

PREPARED BY:

J. F. Doyle

J.F. Doyle

RESPONSE
REQUESTED BY DATE

EXISTING CONDITION: ATTN: Steve Harvey, Ref. R.F.I. #302

Per NCR #1711.

REQUESTED INFORMATION:

Bechtel to Advise Disposition

RESPONSE: APPROVAL TO "USE AS IS" IS ACCEPTABLE.

SEE ATACH: F.E.R. #CC-116, R.E.M. C-2660

Reviewed by:

Date

Response Prepared by: *Steve Harvey*

Civil

J. F. Doyle

4/24/80

Bechtel Approval:

N.A.D.

SUBCONTRACTOR TO COMPLETE

BECHTEL TO COMPLETE

FIELD ENGINEER'S REPORT FORM

MIDLAND UNITS 1 & 2

JOS 7220

DATE 3-15-80

PAGE 1 OF 2

ITEM NO.

INSPECTION DESCRIPTION

ACTION REQUIRED/TAKEN

F.E.R. # CC-116

SUBJECT. BEW NCR-1711

AS STATED IN ATTACHED N.C.R. PIPE RESTRAINT # 611-2-21 (TYPE WAS INSTALLED 5/16" OUT OF TOLERANCE. DWG CALLS E. ELV. 602'-0"; INSTALLED LOCATION IS 602'-0¹³/₁₆"

THE FIELD REQUESTS A RESIDENT ENGINEER'S MEMO APPROVING A "USE AS IS" DISPOSITION FOR BEW N.C.R. # 1711. (ATTACHED)^{COPY}

REM C-2660

4-11-80

REMARKS

ROUTE

J. BETTS

R. GOSLIN

TOTAL (FIVE)

SIGNATURE

FILE NO. 1711

RE- C-2660

DATE 4-11-80

R.S. #2

SUBJECT: PIPE RESTRAINT #G11-2-21, 5/16" OUT OF TOLERANCE

REF: FER CC-116, S. HARVEY, 3-15-80

AAO COORDINATION: Date 4-7-80 / Time / AAO Contact BILL HAGEDORN

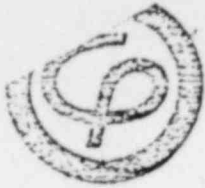
PROJECT ENGINEERING HAS REVIEWED THE ATTACHED FIELD ENGINEER'S REPORT AND HAS GIVEN APPROVAL TO USE A "USE AS IS" DISPOSITION FOR B & W WCR #1711.

UNCONTROLLED
NOT TO BE USED
FOR CONSTRUCTION

RESIDENT ENGINEER [Signature]

AAO Review: Group Supervisor _____

Date: _____



Consumers
Power
Company

Midland Project: P.O. Box 1953, Midland, Michigan 48640 - Area Code 517 631-0951

May 13, 1980


Mr L E Davis
Bechtel Power Corp
PO Box 2167
Midland, MI 48640

MIDLAND PROJECT - B&W CC NCR 1711
File 16.9.2 Serial 125FQA80

In accordance with Field Procedure FID-1.200, please transmit this letter to B&W Construction Company.

B&W CC NCR 1711 has been dispositioned use-as-is by Bechtel Field Engineering and Project Engineering (FER CC-116 & REM C-2660), but no rationale for that disposition has been provided. Before CPCo QA can concur with a use-as-is disposition, the rationale for that disposition must be documented. We, therefore, request that B&W CC return the above referenced Resident Engineer Memo and Field Engineer Report to Bechtel to have them provide this information.

If there are any questions on this request, please contact us.


J L Corley
Site Project QA Superintendent

JLC/REW

CC VNAsgaonkar
WRBird
TCCooke
JWLillywhite
DBMiller
JARutgers
RWShope

1150P 1711

REQUEST FOR INFORMATION

YES Related NO

No. 434 Date 5-15-80

ACT NO. 7220-M-1A S/C NO. CL-238

REF. DWG. OR SPEC.	SHEET	REV.	TITLE
B&WCC NCR #1711	N/A	N/A	Non Conformance

PREPARED BY: W. G. Linn *W.G. Linn*

RESPONSE REQUESTED BY DATE

EXISTING CONDITION:

Attached find NCR #1711, RFI #324, FER CC-116, REM C-2660 and J.L. Corley's letter dated 5-13-80 to L.E. Davis.
Consumers Power requests additional rationale for accept as is basis.

REQUESTED INFORMATION:

ATTENTION: Paul Goguen
Please supply additional rationale.

RESPONSE

Project Engineering reviewed FER CC-116 and B&W NCR 1711 and approved the nonconforming condition to be used as is per REM C-2660. This approval was based on an analysis of the stresses in the embed for the installed out-of-tolerance condition. The analysis showed that the additional stresses induced by the eccentric loading would not increase the designed stresses beyond the allowable limits, Ref. Calc. No. Q108.

Reviewed by: _____ Date _____ Response Prepared by: *Steve Howe*

Civil _____ Bechtel Approval: _____

Elect. NA _____ *3/16/80*

Mech. NA _____

SUBCONTRACTOR TO COMPLETE

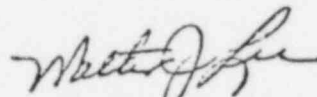
BECHTEL TO COMPLETE

July 17, 1980

TO: ALL SUPERINTENDENTS
FROM: W. J. Lee, Project Manager
SUBJECT: Field Construction Procedures

Per our recent discussion, this is to reconfirm the importance of the Field Construction Procedure (FCP):

1. At no time, should a "FCP Hold/Inspection Point" be by-passed.
2. At no time, should the "tolerance allowed" be exceeded.
3. If for some reason, #1 and #2 cannot be achieved, Engineering must be notified for a resolution.


W. J. Lee

WJL/dbc

cc: V. N. Agaonkar
R. W. Shope
File

corrective action for NCR # 1711

R Shope 7-18-80

REPORT OF NONCONFORMITY

1. JOB NUMBER CL-238	2. UNIT NUMBER 2	3. DATE 3-24-80	4. ITEM NAME Decay Heat Line Restraint	5. ITEM NUMBER PR-18B
6. VENDOR/MANUFACTURER NPS Industries	7. DISCOVERED DURING <input type="checkbox"/> RECEIVING <input type="checkbox"/> TEST <input checked="" type="checkbox"/> CONST.	8. REJECT TAG NUMBER 439	9. PROCEDURE NUMBER 72A	
10. SPECIFICATION NUMBER C 304	11. DRAWING NUMBER C-489	12. PRIOR REPORT OF NONCONFORMITY: N/A		
13. DESCRIPTION OF NONCONFORMITY One side of PR-18B was reworked per Attachment "C". However, inspection sequences 030, 060, & 080 were by-passed during the welding process. The web to flange weld is complete and the flange to flange weld is 95% complete and no inspection has been performed. No web window was cut in web as required at sequence 020.				
14. REPORTED BY <u>R. Lopez Sr.</u> <u>J. Jones</u> NAME DATE 3-24-80	15. VERIFIED BY <u>R. Lopez</u> NAME DATE 3-24-80	16. CORRECTIVE ACTION REQUIRED <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO		
17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 19 CFR 50.55 (e) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <u>H. H. Linn</u> FIELD PROJECT ENGINEER 3-24-80 DATE				
18. RECOMMENDED DISPOSITION: <input checked="" type="checkbox"/> N/A <input type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
19. TECHNICAL JUSTIFICATION FOR RECOMMENDED DISPOSITION INSTRUCTIONS N/A <u>H. H. Linn</u> FIELD PROJECT ENGINEER 4-8-80 DATE				
20. ACTUAL DISPOSITION: <input checked="" type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
21. DISPOSITION INSTRUCTIONS See Attachment <u>H. H. Linn</u> FIELD PROJECT ENGINEER 4-8-80 DATE				
22. APPROVALS B&W FQC <u>R. W. Lopez</u> 4-8-80 SIGNATURE DATE OWNER AGENT <u>R. E. Whitaker</u> 4/24/80 SIGNATURE DATE			23. ANY REVIEW <u>R. Fisher</u> 4/29/80 SIGNATURE DATE	
24. DISPOSITION COMPLETED <u>R. P. Delatalla</u> 6-25-80 NAME DATE		25. DISPOSITION VERIFICATION <u>R. W. Lopez</u> 6-25-80 NAME DATE <input checked="" type="checkbox"/> ACCEPTABLE <input type="checkbox"/> UNACCEPTABLE REPORT OF NONCONFORMITY #		
25. CORRECTIVE ACTION: See Attachment <u>V. N. Aguilera</u> FIELD PROJECT MANAGER 4/8/80 DATE				
27. NONCONFORMITY CLOSED <u>R. W. Lopez</u> FIELD QUALITY CONTROL SUPV. 7-16-80 DATE				

REPORT OF NONCONFORMITY

OB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	2	4-7-80	1724

DISPOSITION INSTRUCTIONS:

1. Revise Attachment C to delete sequences 060, 070, & 080. *i. J. Doyle*
These sequences are neither code nor specification requirements. *5-9-80*
2. Grind weld window as stated in sequence 020. *5-7-80 G.W. Davis*
3. QC to inspect weld window as stated in sequence 030. *5-7-80 R. Murphy*
4. Remove backing bar on the flange to flange weld. *5-7-80 G.W. Davis*
5. Back weld per WIN-101-1/AWS the backing bar removal area if required for full penetration. *5-9-80 G.W. Davis*
6. Inspect the flange to flange weld for full penetration after backing bar removal. *5-7-80 R. Murphy*

CORRECTIVE ACTION:

Hold meeting to advise Field Superintendants as to the necessity of following the sequences as stated in the Field Construction Procedures.

Following is a list of attendees for a meeting held this date 7-15-80 to discuss corrective action for CPCo Reports of Nonconformity #M-03-4-0-004 and #M-03-4-0-044. See attached letter for items discussed during meeting. Also discussed corrective action for B&WCC nonconformance reports 1711 and 1724.

Personnel in attendance:

<i>H Landes</i>	7-15-80
<i>Ed Ballenger</i>	7-15-80
<i>A.C. Johnson</i>	7-15-80
<i>R.D. Brown</i>	7-15-80
<i>R. Fair</i>	7-15-80
<i>C.H. Cutler</i>	7-15-80
<i>H.H. Linn</i>	7-15-80
<i>O. Newby</i>	7-15-80
<i>R.W. Shupe</i>	7-15-80
<i>J. Turner</i>	7-15-80
<i>Nick Jones</i>	7-15-80

June 11, 1980

Copley, Ohio 44321

Telephone: (216) 665-8341

Bechtel Power Corporation
P. O. Box 2167
Midland, MI 48640

Attention: L. E. Davis

SUBJECT: Subcontract 7220-M-1A
NSSS Erection
SERIAL: M-1A-(P)-616

Dear Mr. Davis:

Following is our response to CPCo NCR #M-03-4-0-044 and letter #146FQA80, please transmit to CPCo Quality Assurance.

A meeting will be held with B&WCC Supervision and Q.C. personnel to discuss CPCo Nonconformance Reports M-03-4-0-004 and M-03-4-0-044 (both of which deals with failure to follow Field Construction Procedures).

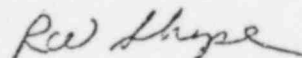
Items to be discussed during this meeting shall include the following:

1. Requirements of B&WCC Quality Assurance Policy 9-QA-05 and Quality Control Procedure 9-QPP-102 to have and follow Field Construction Procedures.
2. To continually review procedures during work activities in order to be aware of changes as they occur.
3. Instruct Quality Control personnel to enforce the procedure requirements.

In addition, we shall also use the above requirements as a topic for a Safety/Q.C. Indoctrination meeting which is presented to the craft personnel.

If you have any questions concerning the above, please contact me.

Very truly yours,



R. W. Shope

RWS/jlj

cc: W. J. Lee
V. N. Asgaonkar
C. D. Thompson
J. L. Corley - CPCo
File

REPORT OF NONCONFORMITY

1. JOB NUMBER CL-238	2. UNIT NUMBER 1	3. DATE 6-11-80	4. ITEM NAME Vent Valve Assy. Body	5. ITEM NUMBER S/N 76
6. VENDOR MANUFACTURER Babcock & Wilcox	7. DISCOVERED DURING <input type="checkbox"/> RECEIVING <input type="checkbox"/> TEST <input checked="" type="checkbox"/> CONST.	8. REJECT TAG NUMBER 443	9. PROCEDURE NUMBER FCP #192	
10. SPECIFICATION NUMBER N/A	11. DRAWING NUMBER 20762-H	12. PRIOR REPORT OF NONCONFORMITY? N/A		
13. DESCRIPTION OF NONCONFORMITY One of the two 3/8"-24 x 3/4" Hx. Hd. screws, MK #34 seized while being removed and broke leaving 5/16" remaining in the mounting block of the top segment of the retaining ring S/N 81 J 11538.				
14. REPORTED BY <u>R.D. Brown</u> NAME DATE 6-11-80	15. VERIFIED BY <u>R.W. Shupe</u> NAME DATE 6-11-80	16. CORRECTIVE ACTION REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO		
17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO <u>H.H. Linn</u> FIELD PROJECT ENGINEER DATE 6-11-80				
18. RECOMMENDED DISPOSITION: <input type="checkbox"/> N/A <input type="checkbox"/> REWORK <input checked="" type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
19. TECHNICAL JUSTIFICATION OR RECOMMENDED DISPOSITION INSTRUCTIONS See Page No. 2 for recommended disposition. <u>H.H. Linn</u> FIELD PROJECT ENGINEER DATE 6-11-80				
20. ACTUAL DISPOSITION: <input checked="" type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
21. DISPOSITION INSTRUCTIONS See SPR-160. See Page 2 for disposition. <u>H.H. Linn</u> FIELD PROJECT ENGINEER DATE 6-24-80				
22. APPROVALS B&W FOC <u>R.W. Shupe</u> 6-24-80 OTHER _____ SIGNATURE DATE SIGNATURE DATE OWNER AGENT <u>R.E. Whitaker</u> 6/26/80 OTHER _____ SIGNATURE DATE SIGNATURE DATE			23. ANALYSIS REVIEW <u>R.E. Whitaker</u> 6-26-80 SIGNATURE DATE	
24. DISPOSITION COMPLETED <u>C.J. Bauer</u> 7-1-80 NAME DATE	25. DISPOSITION VERIFICATION: <input checked="" type="checkbox"/> ACCEPTABLE <input type="checkbox"/> UNACCEPTABLE <u>R.D. Brown</u> 7-1-80 NAME DATE REPORT OF NONCONFORMITY #			
25. CORRECTIVE ACTION				
_____ FIELD PROJECT MANAGER DATE				
27. NONCONFORMITY CLOSED <u>R.W. Shupe</u> 7-1-80 FIELD QUALITY CONTROL SUPV. DATE				

REPORT OF NONCONFORMITY

CB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY #
CL-238	1	6-11-80	1735

RECOMMENDED DISPOSITION

1. Set up and drill a hole into the end of the broken bolt sufficient to allow use of an "easy out", and not damage threads.
2. Using an "easy out" extract remaining section of broken bolt.
3. Set up using a tap, and chase the threads in the damaged stud hole.
- * 4. Inspect condition of threads after rework.

W. Stalbert
6-30-80
↓

C. J. Bowen
6-30-80

50 SITE PROBLEM REPORT

(MAX. 30 CHARACTERS)

VALVE ASSEMBLY

PRIORITY 1 2 3 NONE

LEAD MANAGER J.W. MITCHEM

OPER SUMERS POWER CO

SUPPLIER SEW

CCC. ID 13 HSS NO. 12 SPR NO. 160 REV. NO. 0

NO. CHARGE NO. MR. BUDGET

VENDOR CLAIM NO. / SHIPPING DAMAGE NO.

PART NO. / TCS NO.

60-0012
60-01-001

DESCRIPTION OF PROBLEM

SEE NCR



ORIGINATOR

DATE

SEW NCR # 1735

H.A. GUETLING 6/11/80

STATUS ACTION TO DATE, INCLUDING PERSONS CONTACTED:

L.D. CLINE - NPGD, LYNCHBURG

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL:

SEE NCR # 1735, p2 OF 2

RESOLUTION

RECOMMENDED DISPOSITION IS ACCEPTABLE.
AFTER INSPECTION OF THREADS per item 4
of disposition, report any evidence
of damage.

INFORMATION ONLY

RESOLUTION PREPARED BY RHC DATE 6/18/80

POTENTIAL CROSS-CONTRACT APPLICABILITY

POTENTIAL SAFETY CONCERN

RESOLUTION DOCUMENT NO.

REVIEWED BY Glen R. Wertz DATE 6-18-80
for L.G. Weatherford

YES NO

YES NO

DATE 6-18-80

SPR CLOSEOUT REPORT:

CLOSED OUT BY DATE

SHEET ___ OF ___

REPORT OF NONCONFORMITY

JOB NUMBER	UNIT NUMBER	DATE	REPORT OF NONCONFORMITY
CL-238	1	6-11-80	1735

RECOMMENDED DISPOSITION

1. Set up and drill a hole into the end of the broken bolt sufficient to allow use of an "easy out", and not damage threads.
2. Using an "easy out" extract remaining section of broken bolt.
3. Set up using a tap, and chase the threads in the damaged stud hole
- * 4. Inspect condition of threads after rework. *CJ Rame* 6-30-80

REPORT OF NONCONFORMITY

1. JOB NUMBER CL-238	2. UNIT NUMBER Unit #1	3. DATE 7-10-80	4. ITEM NAME Surveillance Specimen Holder Tube	5. ITEM NUMBER 27-A40
6. VENDOR/MANUFACTURER Babcock & Wilcox	7. DISCOVERED DURING <input type="checkbox"/> RECEIVING <input type="checkbox"/> TEST <input checked="" type="checkbox"/> CONST.	8. REJECT TAG NUMBER 428	9. PROCEDURE NUMBER FCP #97	
10. SPECIFICATION NUMBER N/A	11. DRAWING NUMBER 238856E, Rev. 2	12. PRIOR REPORT OF NONCONFORMITY? N/A		
13. DESCRIPTION OF NONCONFORMITY After machining the flats for SSHT shims, the dimension from centerline of layout to far side of flat is 4 5/8". The Dwg. 238856E, Rev. 2 calls for a minimum dimension of 4 1/4".				
14. REPORTED BY <u>R.O. Brown</u> NAME	<u>7-10-80</u> DATE	15. VERIFIED BY <u>R.W. Shope</u> NAME	<u>7-10-80</u> DATE	15. CORRECTIVE ACTION REQUIRED <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
17. REPORTABLE DEFICIENCY IN ACCORDANCE WITH 10 CFR 50.55 (e) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
			<u>H.H. Linn</u> FIELD PROJECT ENGINEER	<u>7-10-80</u> DATE
18. RECOMMENDED DISPOSITION: <input type="checkbox"/> N/A <input type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input type="checkbox"/> ACCEPT AS IS				
19. TECHNICAL JUSTIFICATION/OR RECOMMENDED DISPOSITION INSTRUCTIONS Vendor to advise. <u>H.H. Linn</u> FIELD PROJECT ENGINEER				
			<u>7-10-80</u> DATE	
20. ACTUAL DISPOSITION: <input type="checkbox"/> REWORK <input type="checkbox"/> REPAIR <input type="checkbox"/> REPLACE <input type="checkbox"/> RETURN <input checked="" type="checkbox"/> ACCEPT AS IS				
21. DISPOSITION INSTRUCTIONS Accept as is. See SPR-163 for rationale. <u>H.H. Linn</u> FIELD PROJECT ENGINEER				
			<u>7-25-80</u> DATE	
22. APPROVALS B&W FQC <u>R.W. Shope</u> <u>7-25-80</u> SIGNATURE DATE OWNER/AGENT <u>R.W. Shope</u> <u>7/28/80</u> SIGNATURE DATE			23. INI REVIEW <u>R.W. Shope</u> <u>7-29-80</u> SIGNATURE DATE	
24. DISPOSITION COMPLETED <u>R.W. Shope</u> <u>7-24-80</u> NAME DATE			25. DISPOSITION VERIFICATION <u>R.W. Shope</u> <u>7-24-80</u> NAME DATE	
25. CORRECTIVE ACTION				
			FIELD PROJECT MANAGER	DATE
27. NONCONFORMITY CLOSED <u>R.W. Shope</u> <u>7-29-80</u> FIELD QUALITY CONTROL SUPV. DATE				

BABCOCK & WILCOX
SITE PROBLEM REPORT

TITLE (MAX. 30 CHARACTERS) SSHT/INTERNAL		PRIORITY 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> NONE <input type="checkbox"/>	
CUSTOMER CONSUMERS POWER CO		LEAD MANAGER, J. W. Mitchem	
SUPPLIER F&W		DOC. ID 13	NSS NO. 12
PA NO.		SPR NO. 163	REV. NO. 0
CHARGE NO.	MR. BUDGET	PART NO./TGS. NO. 620-0012-60 01-001	
DESCRIPTION OF PROBLEM		VENDOR CLAIM NO./ SHIPPING DAMAGE NO.	

SEE ITEM #13 OF NCR.

W. J. LEE

JUL 24 1980

B & W

B&W NCR # 1740

ORIGINATOR

H. A. GUETLING

DATE

7/10/80

STATUS ACTION TO DATE, INCLUDING PERSONS CONTACTED:

L. D. CLINE - NPGD, LYNCHBURG

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL:

**VENDOR TO SUPPLY RESOLUTION,
NOTE: SHIM DOESN'T NEED ANY MORE THAN 4 5/8.**

RESOLUTION

ACCEPT THE 4 5/8" DIMENSION "AS IS", THIS WILL NOT AFFECT FUNCTION, FIT-UP OR STRUCTURAL INTEGRITY OF SSHT MOUNTING.

INFORMATION ONLY

POTENTIAL CROSS-CONTRACT APPLICABILITY

YES NO

POTENTIAL SAFETY CONCERN

YES NO

RESOLUTION DOCUMENT NO.

RESOLUTION PREPARED BY **SRK** DATE **7/16/80**

REVIEWED BY **R. W. Mitchem** DATE **7/16/80**

APPROVED BY **D. J. Gould** DATE **7/17/80**

CLOSED OUT BY _____ DATE _____

SPR CLOSEOUT REPORT:

REPORT OF INSPECTION OF INSERVICE INSPECTION ACTIVITY

DATE July 15, 1980
LOCATION Midland, MI
CONTRACT = 192-064-004
INSPECTOR G. NAVRATIL

1. APPROVED EXAMINATION PROCEDURES AVAILABLE FOR USE.

CONFORMING NON CONFORMING

COMMENTS

N/A

2. CERTIFICATE OF NDE PERSONNEL QUALIFICATIONS

THOSE LISTED _____ HAVE BEEN REVIEWED & ACCEPTED

THOSE LISTED _____ HAVE BEEN REVIEWED & ARE UNACCEPTABLE

COMMENTS

Eye certification for Bruce J. Gormanowski (G-015) expired June 4, 1980.

(Insp. Ticket #046)

3. NDE EQUIPMENT

THE EQUIPMENT LISTED _____ HAVE BEEN REVIEWED & ACCEPTED

THE EQUIPMENT LISTED _____ HAVE BEEN REVIEWED & ARE UNACCEPTABLE

COMMENTS

N/A

4. CONSUMABLE ITEMS

THE ITEMS LISTED _____ HAVE CERTIFICATIONS AND ARE ACCEPTED

THE ITEMS LISTED _____ ARE UNACCEPTABLE

COMMENTS

N/A

5. NOE EXAMINATION PERFORMED IN ACCORDANCE WITH PROCEDURES

THOSE LISTED BELOW ARE CONFORMING

THOSE LISTED BELOW ARE NONCONFORMING

PROCEDURES PERSONNEL THAT WERE CHECKED

N/A

5. NOE DATA REPORTS

THE REPORTS LISTED BELOW HAVE BEEN REVIEWED & ACCEPTED

THE REPORTS LISTED BELOW HAVE BEEN REVIEWED & ARE UNACCEPTABLE

N/A

7. GENERAL COMMENTS

Two (2) days of examination July 8, 1980 and July 9, 1980 were involved in examinations performed by the person in question. He was involved only as a Level I U.T.

Gene Nivental

INSPECTOR

8. RESOLUTION FOR NONCONFORMING ITEMS LISTED ABOVE

Mr. Geranowski had his vision tested on 7/14/80 and his vision was satisfactory. His vision was satisfactory on the dates in question.

9. THE RESOLUTIONS DESCRIBED ABOVE HAVE BEEN REVIEWED AND ACCEPTED

Sanford Hellman 7/24/80

INSERVICE INSPECTION MANAGER

Paul DeCarh

QUALITY ASSURANCE MANAGER



CONSUMERS
PROJECT
COMPANY
QA27-0

NONCONFORMANCE REPORT

Start Up System: Indetermin
PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

PAGE 1 of 3

6. PROJECT NAME: Midland 1 & 2		7. NONCONFORMING PART NO: See Page 3		8. NONCONFORMING PART NAME: Cable Tray		1. NCR SERIAL NO: M-01-9-0-051	
9. SERIAL NUMBER: NA		10. ORG. COMMITTING NC: Bechtel Engineering Bechtel Construction		11. AREA/LOC. OF NC: Cable Spreading Rooms		2. DATE: 7-17-80	
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: Drawing E-42, Sheet 8 paragraph 6 (A) & (B) describes methods of identifying cable trays which have been divided into two parts. Contrary to the above, divided cable trays in the upper and lower cable spreading rooms are not being identified with any consistency. See Page 3.						3. DATE OF REV: NA	
						4. FILE NO: 16.3.1, 16.3.4	
13. QA RECOMMENDATION FOR PART CA: 1. Clarify paragraphs 6 (A) & (B) of Drawing E-42 so that identification of divided cable tray is consistent. 2. Re-identify those cable trays not in accordance with paragraphs 6 (A) & (B) of Drawing E-42. DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input checked="" type="checkbox"/> NOT REQUIRED <input type="checkbox"/>						5. DISTRIBUTION ACTION COPY: LADreisbach	
						INFO COPY: WRBird DBMiller RBCherba EDNewman JWCook RLRixford TCCooke(2) JARutgers JLCorley RASimanek LEDavis DATaggart PKHansen SHHowell GSKeeley BWMarguglio JMilandin	
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA							
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:							
16. DOES NC AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				17. IS NC REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				19. IF YES, DATE & TIME OF REPORT TO NRC: NA			
20. IF YES, WHO MADE REPORT TO NRC: NA				21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA			
22. NCR ORIGINATED BY: <i>WJ [Signature]</i>			23. WRITTEN REPLY REQUIRED BY: 7-31-80 TO ESTABLISH CA COMPLETION DATE		24. SUPERVISOR'S SIGNATURE/DATE: <i>DK Keating 7-17-80</i>		
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:							
26. DESIGN/PROJECT SIG. AUTH. DISP.: NA		27. PMO SIG. AUTH. DISP.: NA		28. PROCUREMENT SIG. CONC. DISP.: NA		29. SIG. OF ORG. RESP. FOR C/A:	
30. FAB/CONST. SIG. AUTH. IMP. DISP.:		31. SIG. OF TEST GROUP ACKNOW. CONDITION: NA		32. FOR MAJOR MOD - FLT. SUPT. SIG. AUTH. DISP.: NA		33. QA AUTH. SIG. TO IMPLEMENT DISP.:	
34. METHOD OF PART CA VERIFICATION:							
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:			36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:			37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)	



Fig 1. Upper Cable Spreading Room.
 Note: Identification is side by side as shown at beginning of each tray section. This tray is near a wall and the opposite side is inaccessible.

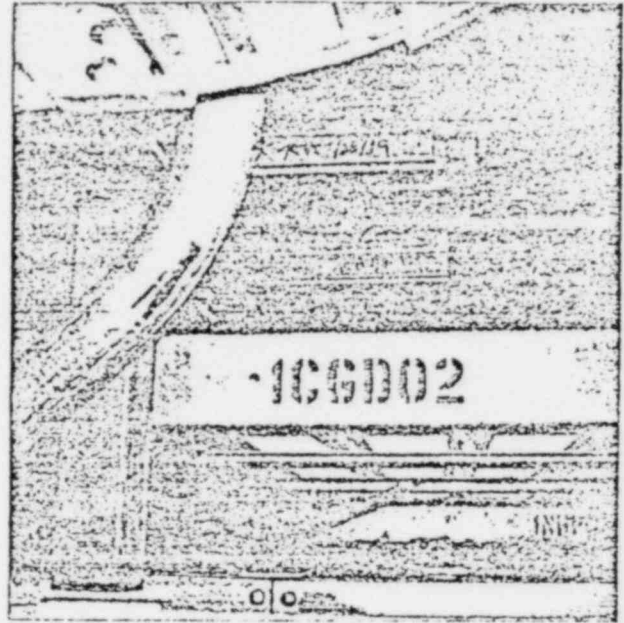


Fig 2 Lower Cable Spreading Room.
 Note: This tray is identified on one side as 1CGD02, on the opposite side as 1CFA01. This tray section is open to view from both sides.

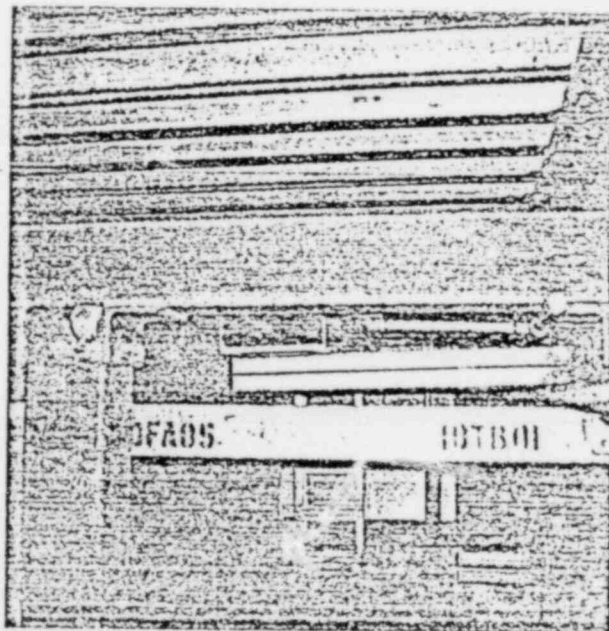


Fig 3 Upper Cable Spreading Room.
 Note: Tray is identified on each end of tray section. When viewed from the opposite side, identification is the reverse of that shown above, ie, 1DTB01 becomes 1DFA05.

6

Start Up System: 2ABA

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENTConsumers
Power
Company
QA27-0

NONCONFORMANCE REPORT

PAGE 1 OF 2

6. PROJECT NAME: Midland Project		7. NONCONFORMING PART NO: 2-632-1-17 (2ELB-10-H23)		8. NONCONFORMING PART NAME: Hanger		1. NCR SERIAL NO: M-01-4-0-052	
9. SERIAL NUMBER: NA		10. ORG. COMMITTING NC: BPCo		11. AREA/LOC. OF NC: NA		2. DATE: 7-21-80	
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: 1. FSAR, paragraph 10.3.6.1 states in part, "The test methods and acceptance criteria of Subarticles NC/ND 2300 (Fracture Toughness Requirements for Materials) are complied with for materials for Class 2 and 3 components". 2. ASME Section III, Subsection NF, paragraph NF-2311 states in part, "Supports integral with components shall meet the requirements for impact testing stipulated for such components in the applicable Subsection". Contrary to the above, a review of the Documentation Package (AEO-12150) for the shear lugs that are provided with hanger 2-632-1-17, indicates that there is no evidence impact testing was performed on						3. DATE OF REV: NA	
						4. FILE NO: 16.3.1	
13. QA RECOMMENDATION FOR PART CA: the subject lugs as required.						5. DISTRIBUTION ACTION COPY: LADreisbach	
1. Provide impact tested lugs for subject hanger. 2. Review other hangers for similar problems and document.						INFO COPY: WRBird DBMiller RBCherba EDNewman JWCook RLRixford TCCooke(2) JARutgers JLCorley RASimanek LEDavis DATaggart PKHansen SHHowell GSKeeley BWMarguglio JMilandin	
DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input type="checkbox"/> NOT REQUIRED <input type="checkbox"/>							
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> REASON, LOCATION & TYPE OF HOLD TAGS APPLIED: NA							
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:							
16. DOES NC AFFECT Q-LIST ITEM: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				17. IS NC REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				19. IF YES, DATE & TIME OF REPORT TO NRC: NA			
20. IF YES, WHO MADE REPORT TO NRC: NA				21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA			
22. NCR ORIGINATED BY: <i>A. Howell 7-21-80</i>		23. WRITTEN REPLY REQUIRED BY: 8-6-80 TO ESTABLISH CA COMPLETION DATE		24. SUPERVISOR'S SIGNATURE/DATE: <i>A. Howell 7-21-80</i>			
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:							
26. DESIGN/PROJECT SIG. AUTH. DISP.:		27. PMO SIG. AUTH. DISP.:		28. PROCUREMENT SIG. CONC. DISP.:		29. SIG. OF ORG. RESP. FOR C/A:	
30. PM/CONST. SIG. AUTH. IMP. DISP.:		31. SIG. OF TEST GROUP ACKNOW. CONDITION:		32. FOR MAJOR MOD - FLT. SUPT. SIG. AUTH. DISP.:		33. QA AUTH. SIG. TO IMPLEMENT DISP.:	
34. METHOD OF PART CA VERIFICATION:							
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION:		36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:		37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)			



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NONCONFORMANCE REPORT

PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-4-0-05

PAGE 2 OF 2

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:



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QA27-0

NONCONFORMANCE REPORT

6. PROJECT NAME: Midland 1 & 2		7. NONCONFORMING PART NO: IDGA01 & IDFB01		8. NONCONFORMING PART NAME: Cable Tray		1. NCR SERIAL NO: M-01-5-0-053	
						2. DATE: 7-21-80	
9. SERIAL NUMBER: NA		10. ORG. COMMITTING INC: Bechtel Construction Bechtel Engineering		11. AREA/LOC. OF INC: Lower Cable Spreader Room		3. DATE OF REV: NA	
						4. FILE NO: 16.3.1, 16.3.4	
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: During overinspection of the above cable trays, the following discrepancies were noted: (1) Cable tray IDGA01 was not identified per Drawing E-42, Revision 45, Sheet 8, paragraph 6A and 6B. (Identification on this tray will not be visible after cable loading of tray's beneath it). (2) Cable tray IDFB01 is identified as 1BFB01 on Drawing E-602 Revision 2, Sheet 1, zone 7-F.						5. DISTRIBUTION ACTION COPY: LADreisbach INFO COPY: WRBird DBMiller RBCherba EDNewman JWCook RLRixford TCCooke(2) JARutgers JLCorley RASimanek LEDavis DATaggart PKHansen SHHowell GSKeeley BWMarguglio JMilandin	
13. QA RECOMMENDATION FOR PART CA: (1) Identify cable tray IDGA01 in a manner which will be visible after construction is complete. (2) Correct Drawing E-602 to reflect proper cable tray identification.							
DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input checked="" type="checkbox"/> NOT REQUIRED <input type="checkbox"/>							
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA					
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:							
16. DOES NC AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				17. IS NC REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				19. IF YES, DATE & TIME OF REPORT TO ING: NA			
20. IF YES, WHO MADE REPORT TO ING: NA				21. IF YES, NAME OF ING OFFICIAL TO WHOM REPORTED: NA			
22. NCR ORIGINATED BY: <i>[Signature]</i>		23. WRITTEN REPLY REQUIRED BY: 8-4-80		24. SUPERVISOR'S SIGNATURE/DATE: <i>[Signature]</i> 7-21-80			
		TO ESTABLISH CA COMPLETION DATE					
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:							
26. DESIGN/PLANT ENG. AUTH. DISP.:		27. PM SIG. AUTH. DISP.:		28. PROCUREMENT SIG. CONC. DISP.:		29. SIG. OF CIG. RESP. FOR C/A:	
		NA		NA			
30. FAB/CONST. SIG. AUTH. EMP. DISP.:		31. SIG. OF TEST GROUP ACKNOW. CONDITION:		32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:		33. QA AUTH. SIG. TO IMPLEMENT DISP.:	
		NA		NA			
34. METHOD OF PART CA VERIFICATION:							
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING ACCEPTATION:		36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:			37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)		



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NONCONFORMANCE REPORT

PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

RCR SERIAL NUMBER: M-01-5-0-05

PAGE 2 OF 2

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN FABRICATION CONSTRUCTION PROCUREMENT INSPECTION
OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK #1 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:



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QA27-0

NONCONFORMANCE REPORT

6. PROJECT NAME: Midland 1 & 2		7. NONCONFORMING PART NO: NA		8. NONCONFORMING PART NAME: Husky-Burndy Cable Tray & Fasteners		1. NCR SERIAL NO: M-01-9-0-054	
9. SERIAL NUMBER: NA		10. ORG. COMMITTING NCR: Bechtel Construction Bechtel Engineering		11. AREA/LOC. OF NCR: Lower Cable Spreader Room		2. DATE: 7-25-80	
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: 1. Holes in cable tray furnished by Husky-Burndy are sized for 3/8" splined bolts. Bolts being supplied for use with these cable trays are 3/8" with a spline size of 7/16". Cable tray holes are being enlarged with a 27/64" drill to accommodate the new bolts. There is no approved procedure authorizing the enlarging of cable tray holes. (Contd on Page 3)						3. DATE OF REV: NA	
						4. FILE NO: 16.3.4, 16.3.1	
13. QA RECOMMENDATION FOR PART CA: 1. Obtain approved procedure for modifying cable tray. 2. Determine if spline length affects bolt function. 3. Determine if all nuts meet "Q" requirements. 4. Remove all Copes bolts DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input checked="" type="checkbox"/> NOT REQUIRED <input type="checkbox"/>						5. DISTRIBUTION ACTION COPY: LADreisbach	
						INFO COPY: WRBird DBMiller RBCherba EDNewman JWCook RLRixford TCCooke(2) JARutgers JLCorley RASimanek LEDavis DATaggart PKHansen SHHowell CSKeeley BWMarguglio JMilandin	
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA							
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:							
16. DOES NC AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				17. IS NC REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				19. IF YES, DATE & TIME OF REPORT TO NRC: NA			
20. IF YES, WHO MADE REPORT TO NRC: NA				21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA			
22. NCR ORIGINATED BY: 		23. WRITTEN REPLY REQUIRED BY: 8-1-80 TO ESTABLISH CA COMPLETION DATE		24. SUPERVISOR'S SIGNATURE/DATE: 7-25-80			
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:							
26. DESIGN/PROJECT SIG. AUTH. DISP.:		27. IWD SIG. AUTH. DISP.:		28. PROCUREMENT SIG. CONC. DISP.:		29. SIG. OF ENG. RESP. FOR C/A:	
30. FAB/CONST. SIG. AUTH. IMP. DISP.:		31. SIG. OF TEST GROUP ACTION CONDITION:		32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.:		33. QA AUTH. SIG. TO IMPLEMENT DISP.:	
34. METHOD OF PART CA VERIFICATION:							
35. SIG. OF ENG. RESP. FOR PART C/A SIGNIFYING COMPLETION:			36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE:			37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE)	



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PROCESS CORRECTIVE ACTION

PRODUCTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-01-9-0-05

PAGE 2 OF 3

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

43. METHOD OF PROCESS CA VERIFICATION:

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

NCR SERIAL NO: M-01-9-0-054
DATE: 7-25-80
DATE OF REV: NA
FILE NO: 16.3.4, 16.3.1

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

(Contd from Page 1)

2. New 3/8" bolts being supplied for use in Husky-Burndy cable tray were found to have splines of varying length.
It is indeterminate if the variation in spline length will affect the ability of the bolt to perform its proper function.
3. Three types of nuts are being used in the assembly of Husky-Burndy cable tray. One is 7/16" deep, with a recess in the washer end. The other two are 5/16" deep and identical except for identification. One has a depression mark in two of its corners, plus a ring around the threaded portion on the end opposite the washer. The other nut is unmarked.
It is indeterminate if all three nuts are suitable for use with "Q" tray.
4. Copes fasteners were to be purged from the work areas.
Contrary to this, several were found in the work area at 568' level.



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NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

PAGE 1 OF 4

6. PROJECT NAME: Midland 1 & 2	7. NONCONFORMING PART NO: NA	8. NONCONFORMING PART NAME: NA	1. NCR SERIAL NO: N-01-4-8-088
9. SERIAL NUMBER: NA	10. ORG. COMMITTING NO: Bechtel Const. and J. L. Manta QA	11. AREA/LOC. OF NO: J. L. Manta Documentation	2. DATE: 10-25-78
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: 1. J. L. Manta QA Manual, 4.0.0 Material Control and Storage, 4.2.0 states in part, "All 'rejected' and 'hold' materials will be placed in predesignated hold areas until completion of the required nonconformance and corrective action measures, nonconforming coating material will be segregated and a QC hold tag JLM 1-3 will be written".			3. DATE OF REV: 2-19-79* Closed 7-14-80
13. QA RECOMMENDATION FOR PART CA: 1. & 2. Submit SDDR per Bechtel Spec G-23 for Project Engineering disposition of the nonconforming item and review all past quality control documents for any and all similar nonconforming items.			4. FILE NO: 16.3.4, 16.7
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA			5. DISTRIBUTION ACTION COPY: LADreisbach
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:			INFO COPY: WLBarclay PMMartinez WCBates JMilandin WRBird DBMiller TCCooke TMoring JLCorley JFNewgen ADeLange DATaggart RHermeston PKHansen SHHowell RLRixford RASimanek JARutgers GSKeeley LEDavis BWMarguglio JWCook

(Contd on Page 3)

(Contd on Page 3)

15. DOES NO AFFECT 2-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	17. IS NO REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
16. IS NO REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	19. IF YES, DATE & TIME OF REPORT TO NRC: NA
20. IF YES, WHO MADE REPORT TO NRC: NA	21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA
22. NCR ORIGINATED BY: <i>H. A. [Signature]</i>	23. WRITTEN REPLY REQUIRED BY: 11-10-78 TO ESTABLISH CA COMPLETION DATE
24. SUPERVISOR'S SIGNATURE/DATE: <i>RCW Wollney</i>	
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE: Item 1 and 2: Records were reviewed and dispositioned per the requirements of J L Manta QA Program. Item 3: Initiated calibration log and equipment maintenance per Quality Assurance requirements. Item 4: <i>RCW 7/14/80</i> NA Based on Bechtel response to Item 4, LAD-1634 dated July 10, 1980, material received at that time was not used in "Q" areas.	

26. DESIGN/PROJECT SIG. AUTH. DISP.: NA	27. PNO SIG. AUTH. DISP.: NA	28. PROCUREMENT SIG. CONC. DISP.: NA	29. SIG. OF ORG. RESP. FOR C/A: NA
30. FAB/CONST. SIG. AUTH. DISP.: NA	31. SIG. OF TEST GROUP ACKNOW. CONDITION: NA	32. FOR MAJOR WOB - FLT. SUPP. SIG. AUTH. DISP.: NA	33. QA AUTH. SIG. TO IMPLEMENT DISP.: NA
34. MEMOS OF PART CA VERIFICATION: 1. Review of Bechtel Letter LAD: 689 (attached) and J L Manta's documentation. 2. Review of J. L. Manta calibration log records and equipment. 3. NA			
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: NA	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: NA	37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETED) <i>RCW 7/14/80</i>	

~~This revision does not indicate Part Corrective Action closure.~~

Document Control (1141 - 73*10*01)

RCW Wollney 7/14/80



Consumers
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PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT
M-01-4-3-088
ROR SERIAL NUMBER:

PAGE 2 OF 4

18. CA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.
See attached written response.

19. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

NA

20. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER _____

21. CA RECOMMENDATION FOR PROCESS CA:

Items 1 through 4: Determine root cause and take corrective action to preclude repetition. NOTE: Item 4 - provide assurance that in the absence of the site QA/QC inspector, the appropriate quality documents can be maintained per Quality Assurance Program requirements.

22. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 20 & DATE OF COMPLETION:

Respond to this office no later than November 10, 1978.

Item #1 & 2. The Quality Assurance Manager has instructed the QA/QC inspector to promptly label and segregate any future similar problems. Item was not dispositioned for Q use it was used "in other areas" (non-Q) per J L Manta QA Manual 4.4.0, at the direction of Manta Project Superintendent.

Item 3. The QA Manager has revised the calibration frequency and directed it to be logged, and labeled as such.

Item 4. Work exception record (JLM Form 1001) was completed 11-14-78, documenting records omission, and past records were completed since arrival of the QA/QC inspector. The QA/QC inspector has been instructed that storage and

23. METHOD OF PROCESS CA VERIFICATION:

receiving documents must be completed by a qualified field QA/QC inspector.

Review of written response, verbal verification with Manta representatives, and verification and review of documents. Copy of written response LAD: 656, attached.

24. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

NA

25. PROCESS CA COMPLETION VERIFIED BY DATE:

[Signature] (Jan 3, 1979)
INA

NCR SERIAL NO: M-01-4-8-088
 DATE: 10-25-78
 DATE OF REV: 2-19-79 Closed 7-14-80
 FILE: 16.3.4, 16.7

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

(Contd from Page 1)

1. (Contd)

During surveillance of J. L. Manta's records, JLM form 200 #39 for batch # 6-807199 indicated that a five gallon container was received with a leak.

Contrary to the above, the material was not segregated and tagged and subsequently released for use in the Auxiliary Building.

2. Bechtel Specification G-23, General Requirements for Supplier Quality Assurance Programs 3.2.1 states, "Any departure from the requirements of the procuring documents, which the supplier intends to incorporate into the completed item or service provided must be documented on a Supplier Deviation Disposition Request (SDDR). Deviation Requests shall be submitted to the Bechtel Project Engineer with a copy to the Bechtel Shop Inspector if assigned within five (5) working days after detection".

Contrary to the above, the leaking container identified on JLM form 200 #39 for batch #6-807199 was not documented on an SDDR and accepted by Bechtel Project Engineer prior to issuance for use.

3. J. L. Manta QA Manual 7.3.0 states, "The calibration log will record equipment name, serial number, date of calibration, rejects of calibration and disposition". 7.7.0 states, "Inspection equipment will be labeled showing calibration status".

Contrary to the above, during surveillance of Manta's records calibration of surface thermometer #7029 was not logged nor was the item labeled.

4. J. L. Manta QA Manual 4.7.0 states, "It shall be the responsibility of the Field Quality Assurance/Quality Control Inspector to document material status inspections on JLM 300".

Contrary to the above, during a surveillance of Manta's records JLM form 300 dated from April 25, 1978 to August 1, 1978 were signed as inspected by K. Leighton, a Superintendent.

13. QA RECOMMENDATION FOR PART CA:

(Contd from Page 1)

Item 1. & 2. (Contd)

Any nonconforming items found not dispositioned per Spec G-23, identify and submit on SDDR for Project Engineering disposition.

- Item 3. Calibration log and equipment calibration implemented prior to the issuance of this report.

- Item 4. Review nonconforming documents for compliance to QA Manual and Spec A-15. Identify and document any and all nonconforming items detected in the aforementioned documents by SDDR(s) for Project Engineering disposition.

NCR SERIAL NO: M-01-4-8-088
DATE: 10-25-78
DATE OF REV: 2-19-79 Closed 7-14-80
FILE: 16.3.4, 16.7

13. QA RECOMMENDATION FOR PART CA: (Contd)

NOTE: Respond to this office in writing at the completion of corrective action with findings and corrections indicated no later than November 10, 1978.

CONSUMERS POWER COMPANY
RECEIVED
JUL 1 1980

FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

Consumers Power Company
P. O. Box 1963
Midland, MI 48640

Attention: J. L. Corley

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640



July 10, 1980

Job 7220 Midland Project
CPCo NCR M-01-4-8-088
Complete Response
LAD-1634 Action Item-478

Dear Mr. Corley:

This letter addresses the part corrective action as identified in subject NCR, item #4, Section 12, page 3 of 4.

J. L. Manta letter M-450-153 indicates that upon review of all the material received and stored by their field superintendent all was used on Class II work on concrete in the Auxillary Building. This material was therefore not required to be received and inspected by J. L. Manta Q.A./Q.C. inspector in accordance with their Q.A. Manual.

Furthermore, J. L. Manta has reviewed and can verify that all coatings used in Class I areas were received and inspected by a qualified J. L. Manta field Q.A./Q.C. Inspector in accordance with their Q.A. Manual in effect at the time.

If you need any additional information, please contact George Kasparek of this office.

Very truly yours,

LADreisbach

L. A. Dreisbach
Project Quality Assurance
Engineer

LAD/GPK/bss

cc: W. Bird
B. Marguglio
D. Miller

JLC	
DRK	
XRGW	
HPL	
FILE	

CONSUMERS POWER CO. (INC.)
RECEIVED
FEB 9 1979

FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640



February 8, 1979

Consumers Power Company
P.O. Box 1963
Midland, MI 48640

Attention: J. L. Corley

Job 7220 Midland Project
CPCo NCR M01-4-8-088 Complete Response
File: 2610
LAD: 689 Action Item: 478

Dear Mr. Corley:

Reference: Bechtel Letter LAD-656 dated 1/23/79, Dreisbach to Corley.

This letter addresses the part corrective action as identified in the subject NCR.

The part corrective action requested that a review be conducted on all of Manta's past discrepancy reports for proper disposition.

A review of all Manta's Coating Work Exception Records (from JLM-1001) for the A-15 purchase order revealed that Manta's site QA/QC inspector has dispositioned these exception records in accordance with their approved program. Discrepancies requiring Bechtel disposition were issued to Bechtel. Manta's QA/QC inspector only dispositioned exception reports concerning "reject" material or "repair" to a Bechtel approved standard procedure.

This letter, which supplements the referenced response identified above, is considered to be a complete response to the subject NCR.

Very truly yours,

L. A. Dreisbach
Project Quality Assurance Engineer

LAD/RCH/re

cc's: W. Bird
B. Marguglio
J. Milandin
W. Moring
P. Martinez
W. Barclay
L. Stornetta

X JLC	
DRK	
EGW	
FRK	
XGTB	
GE	
FILE	

CONSUMERS POWER COMPANY
RECEIVED
JAN 24 1979

FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

Consumers Power Company
P.O. Box 1963
Midland, MI 48640

Attention: J. L. Corley

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640

January 23, 1979

XGIB	
PRK	
RGW	
PRK	
XGTB	(1/23/79)
QE	
FILE	

Job 7220 Midland Project
CPCo NCR M01-4-8-088 Complete
Response
LAD: 656 Action Item: 478

Dear Mr. Corley:

The subject NCR identified several areas of concern with the paint and coating Subcontractor, J. L. Manta, Company.

We have forwarded your NCR to J. L. Manta, Company who provided the following response.

NCR Problems 1 and 2:

Failure to segregate and tag a five gallon container of material that had a minor leak.

Response:

A coating exception record (JLM Form 1001) was written indicating the non-compliance that the material had not been labeled with a reject tag nor segregated. Investigation revealed the material was removed from storage on September 21 and was indicated as removed on JLM Form 300, No. 246. The material was removed from storage and used in non-"Q" areas of the Auxiliary Building. No further corrective action was necessary and therefore, the non-compliance was indicated as closed out on JLM Form 1003 to prevent recurrence. The Quality Assurance Manager has instructed the QA/QC Inspector on site to promptly label and segregate any such future similar problems.

The Manta Project Superintendent determined the leak to be very minor which would not affect the quality of the material. Therefore, since the material leak did not constitute a deviation from the project specification nor used in Q application, a SDDR is considered to be unnecessary.

NCR Problem #3:

Failure to record calibration of surface thermometer #7029 and failure to label said thermometer.

LAD: 656
January 23, 1979
Page 2

Response:

Surface thermometer #7029 was calibrated on September 22, 1978 and logged as such on the calibration log. The frequency of calibration as indicated in the calibration log was 6 month interval. Therefore, no non-compliance report was written. The Quality Assurance Manager has revised the calibration frequency from 6 months to 1 week. The thermometer has been labeled to indicate the current calibration status.

The field QA/QC Inspector has been cautioned concerning the necessity of monitoring the calibration of inspection equipment.

NCR Problem #4:

The field QA/QC Inspector failed to document material status inspections on JLM Form 300.

Response:

Initially materials were received and the associated records maintained by the Project Superintendent verifying the storage of the material was in compliance with the contract documents. Subsequently, upon arrival on the site, the Field QA/QC Inspector, inspected the material and verified its proper storage with the Project Superintendent. However, the Field QA/QC Inspector failed to complete the appropriate receiving and storage documents through a misunderstanding. Coating work exception record (JLM Form 1001) was completed on 11/14/78 documenting the records omission for JLM Forms 100, 200, and 400. Since the Field QA/QC Inspector had inspected the material and storage areas prior to the use of the material, he has completed the appropriate receiving and storage documents. To prevent recurrence of this problem, the Field QA/QC Inspector has been instructed that receiving and storage documents must be completed by a qualified Field QA/QC Inspector.

In addition, in the absence of the QA/QC Inspector, no Q work is allowed to be performed. Per discussion with the QA/QC Inspector and Project Superintendent, this requirement prevents a) application of any coating material designated as "Q", b) withdrawal of Q material from storage and c) receipt of Q material.

LAD: 656
January 23, 1979
Page 3

I believe this responds to all of your concerns expressed in the subject NCR. Should you have any additional questions, please contact my office.

Very truly yours,

L. A. Dreisbach

for. L. A. Dreisbach
Lead Quality Assurance
Engineer

LAD/RCH/re

cc: W. Bird
B. Marguglio
J. Milandin
W. Moring
P. Martinez
W. Barclay
L. Stornetta



Consumers
Power
Company

NONCONFORMANCE REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

PAGE 1 of 3

6. PROJECT NAME: Midland 1 & 2		7. NONCONFORMING PART NO: NA		8. NONCONFORMING PART NAME: Coating of Containment Building Liner		1. PER SERIAL NO: M-01-4-8-108	
9. SERIAL NUMBER: NA		10. DES. COMPLETION NO: Bechtel Const. and J. L. Manta QA		11. AREA/LOC. OF NO: Plate Containment Bldg. #2		2. DATE: 12-13-78	
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: Bechtel Specification C-110, Rev. 8, Recoating Work of Containment Building Liner Plate, 9.3.2.f states, "Check continuously for the following coating defects and take appropriate corrective action: 1) Loss of adhesion to metal substrate or between coats... 3) Peeling between coats or to metal substrates... If any of the above defects do occur, the coating of the area in question shall be repaired in accordance with repair procedures as approved by the Contractor or as noted above". (Contd on Page 3)						3. DATE OF REV: 4-30-80 Closed 7-21-80	
						4. FILE NO: 16.3.4, 16.7	
13. CA RECOMMENDATION FOR PART CA: Project Engineering: Determine root cause and corrective action to be taken.						5. DISTRIBUTION ACTION COPY: LADreisbach	
						INFO COPY: JWCook JMilandin JWBarclay DBMiller WCBates WRBird WWhoring TCCooke(2) JFNewgen JLCorley RASimanek ADeLange DATaggart RHermenton PKHansen SHHowell JARutgers GSKeeley RLRixford BWMarguglio LEDavis PAParrinez EDNewman	
14. FIELD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NUMBER, LOCATION & TYPE OF FIELD TAGS APPLIED: NA							
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> JUSTIFICATION BELOW:							
16. DOES IT AFFECT Q-1000 ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				17. IS IT REPORTABLE PER 50.55(*): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
18. IS IT REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				19. IF YES, DATE & TIME OF REPORT TO JRC: NA			
20. IF YES, WHO MADE REPORT TO JRC: NA				21. IF YES, NAME OF JRC OFFICIAL TO WHOM REPORTED: NA			
22. NCR ORIGINATED BY: <i>M. J. Bechtel</i>		23. WRITTEN REPLY REQUIRED BY: 1-4-79 TO ESTABLISH CA COMPLETION DATE		24. SUPERVISOR'S SIGNATURE/DATE: <i>[Signature]</i>			
25. PART CA DESCRIPTION, JUSTIFICATION & COMPLETION DATE: The damaged area was traced to hydraulic oil contaminating the prime coat. Subsequent action was not extensive enough to provide satisfactory adhesion. Repair of the damage will be as recommended in a Bechtel M&QS liner plate inspection report under the Bechtel Quality Control Program as part of the total liner plate fix per NCR #M-01-5-8-089.							
26. DESIGN/PROJECT SIG. AUTH. DESP.: NA		27. P.O. SIG. AUTH. DESP.: NA		28. PROCUREMENT SIG. AUTH. DESP.: NA		29. SIG. OF DES. RESP. FOR THIS: NA	
30. FAB/CONST. SIG. AUTH. DESP.: NA		31. SIG. OF TEST GROUP ACKNOW. CONDITION: NA		32. FOR WARE MOD - PLS. SUPPL. SIG. AUTH. DESP.: NA		33. CA AUTH. SIG. TO DOCUMENT DESP.: <i>[Signature]</i>	
34. METHOD OF PART CA VERIFICATION: Reviewed Bechtel letter #LAD-1471.							
35. SIG. OF DES. RESP. FOR PART CA IDENTIFYING COMPLETION: NA		36. SIG. VERIFYING PART CA & FIELD TAG REMOVAL DATE: NA		37. NCR CLOSED BY DATE: (PART ENGINEER OR COMPLETE) <i>[Signature]</i> 4/30/80 <i>R. G. Wollney</i> 7/21/80			



Consumers
Power
Company

NONCONFORMANCE REPORT

PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT
M-01-4-8-108
NCR SERIAL NUMBER:

PAGE 2 of 3

18. CA ASSESSMENT OF ROOT CAUSE(S):

Unknown: to be determined.

19. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

NA

20. PROCESS CA DERIVED FROM:

DESIGN FABRICATION CONSTRUCTION PROCUREMENT INSPECTION
OTHER

21. CA RECOMMENDATION FOR PROCESS CA:

1. Bechtel Const: Determine root cause of inaction on disposition of the nonconforming items and take corrective action to preclude repetition, to be not less than, but to include training all subcontracts administration personnel the appropriate method for subcontractors to document nonconforming items for disposition.
2. J. L. Manta QA: Unknown, to be determined pending determination of root cause.

22. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 21 & DATE OF COMPLETION:

Processed corrective action closed based on Bechtel letters LAD-1471 dated April 3, 1980 and LAD-1643 dated July 17, 1980. NOTE: Block 37 was signed off inadvertently by GTBlack on 4/30/80. This is based on a telephone conversation with him on July 13, 1980.

23. METHOD OF PROCESS CA VERIFICATION:

See Block 42.

24. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

NA

25. PROCESS CA COMPLETION VERIFIED BY/DATE:

R.G. Wollney 7/21/80

NCR SERIAL NO: M-01-4-8-108
DATE: 12-13-78
DATE OF REV: 4-30-80 Closed 7-21-80
FILE NO: 16.3.4, 16.7

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

(Contd from Page 1)

On the liner plate of Reactor Building #2, there appears to be peeling and/or loss of adhesion between coats at the following locations:

- 1) Approximately 32^o @ elevation 626'-0"
- 2) Approximately 34^o @ elevation 623'-0"
- 3) Approximately 138^o @ elevation 643'-6"

Although J. L. Manta QC documented two of the three areas on Form JLM-1001 Coating Work Exception Record #3 and #4 dated October 19 and 20, 1977 respectively, no repair nor disposition, approved by the Contractor, followed the documentation of the above items.

CONSUMERS POWER CO
RECEIVED
JUL 18 1980
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640

BECHTEL

July 17, 1980

Consumers Power Company
P. O. Box 1963
Midland, MI 48640

Attention: J. L. Corley

Job 7220 Midland Project
CPCo NCR M-01-4-8-108
Supplemental Response
LAD-1643 Action Item-528

Dear Mr. Corley:

Reference: LAD-1471, dated April 3, 1980

This is a supplementary response to the subject NCR to clarify item #7 of the complete response LAD-1471.

Item #7 of the response dated April 3, 1980 makes reference to an adhesion test procedure that was to be released prior to April 30, 1980. Field Procedure FPA-1.000 was issued April 18, 1980 to provide instruction for the determination of coating adhesion by the Elcometer Adhesion test method. The minimum allowable tensile strengths for the adhesion test are shown on FCR A-205 to drawing A-72Q.

The three discrepant areas identified in the NCR M-01-4-8-108 are shown on roll out drawings FSK-CC2-179-CPZ and repairs will be made.

If you need any additional information concerning the above, please contact George Kasperek of this office.

Very truly yours,

LADreisbach
L. A. Dreisbach
Project Quality Assurance
Engineer

XJLC	R
DRK	
RGW	W
HPL	
FILE	

LAD/GPK/bss

cc: W. Bird
B. Marguglio
D. Miller

CONSUMERS POWER COMPANY
RECEIVED
APR 14 1980
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640



April 3, 1980

Consumers Power Company
P. O. Box 1963
Midland, MI 48640

Attention: J. L. Corley

Job 7220 Midland Project
CPCo NCR M-01-5-8-089 &
CPCo NCR M-01-4-8-108
Complete Response
LAD-1471 Action Item-479
& 528

Dear Mr. Corley:

The subject NCR's identified discrepancies found in containment #2 liner plate protective coating.

In response Bechtel has taken the following actions to provide Part/Process Cause and Corrective Action:

- 1) Bechtel has performed and issued a report of inspection of the liner plate. This inspection was performed by Bechtel M & QS 4/3/79 to 5/3/79. Roll out drawings FSK-CC2-179-LP2 identifying the location of defective areas were included in this report.

The defects noted during this inspection are grouped as follows, with the accompanying cause:

- a) Coating removal in order to attach hangers, restraints or other hardware. This type of defect is an ongoing thing and acceptable within reasonable limits.
- b) Nicks and scratches caused by construction activity. This type of defect was the most common.
- c) One accidentally damaged area identified in CPCo NCR M-01-4-8-108. The peeling and adhesion loss was traced to damage of the prime coat by hydraulic fluid. Subsequent repair of the area was not extensive enough to provide satisfactory adhesion.

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XGTA	
QE	
FILE	

Mr. J. L. Corley
LAD-1471
Page 2

- d) Surface contamination of the uncured prime coat caused by airborne particles.
- e) Localized poor adhesion of mist coat to the primer.
- f) Localized primer overlap of finish coat.

This inspection uncovered numerous defects, however, concluded that most were cosmetic in nature and should not result in any safety-related problem.

Repairs of these defects are divided into three classes, depending upon method and extent of recommended corrective action. These repair classes are a) minor surface sanding which does not remove mist coat, b) removal and re-application of the mist coat, c) removal of all coating to bare metal with re-application of both primer and mist coats.

Repair of the defects will be made as recommended in the report with the possible exception of areas or parts of areas, which are physically inaccessible. These areas will be dispositioned on a case basis with appropriate documentation.

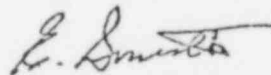
- 2) Liner plate protective coating is no longer a subcontract item. Future work will be performed by Bechtel and brought under our Quality Control Program.
- 3) If a subcontract should be considered at some time in the future for this application, the controls now imposed on this program would be imposed upon them.
- 4) Bechtel has assigned a coating engineer to remain on site while any coating work is in progress and M & QS Bechtel personnel will be available in an advisory capacity while repair is being conducted.
- 5) Specification A41 Q (Field Priming and/or top coating of steel surface) revision 5 requires a Level II inspector to monitor the inspection performed by Level I Inspector, both qualified per ANSI N-45.2.6. The Level II Inspector being available by 3/1/80 (reference QCIR C-8.50 and FCR A 194). The FCN also addresses form changes, adhesion procedure requirements, painter re-qualification and adhesion checks.

Mr. J. L. Corley
LAD-1471
Page 3

- 6) Bechtel M & QS has conducted formal training sessions for Quality Control personnel on this subject. Additional training sessions will be held and PQCI C-8.50 is being updated (currently in the client review cycle). All newly hired painters shall be qualified to the requirements of specification A-41 Q and formal training sessions shall be conducted from them. The training that has been conducted and the training that will be held in the future will alleviate the problems noted in the past.
- 7) Adhesion test procedure is being developed and will be released prior to 30 April 1980.

Should you need any additional information, please contact Phil Falkenberg of this office.

Very truly yours,



Law - L. A. Dreisbach
Project Quality Assurance
Engineer

LAD/PEF/bss

cc: W. Bird
B. Marguglio
D. Miller



NONCONFORMANCE REPORT

6. PROJECT NAME: Midland 1 & 2	7. NONCONFORMING PART NO: Support 541 Support 545	8. NONCONFORMING PART NAME: Conduit Support	1. THE SERIAL NO. N-01-4-9-063
9. SERIAL NUMBER: NA	10. ORG. COMMITTING NO: Bechtel Construction	11. AREA/LOC. OF NO: 614' Aux Bldg, Room 1D01 and 2D01	2. DATE: 6-22-79
			3. DATE OF REV: Closed 7-7-80
			4. FILE NO: 16.3.4

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS SPECIFIED" CONDITION WITH REFS:
Paragraph 5.2 of C-304(Q) Rev 5 states, "Details, fabrication, and types of connections to be used (i.e., bolted or welded) shall be in accordance with the drawings".
Paragraph 6.2.7 of C-304(Q) Rev 5 states, "Additional welds not shown on the drawings other than as specified in sections 6.2.5 and 6.2.6, require field engineering approval prior to final acceptance".
Contrary to the above, E-42(Q) Sh 545-A Detail 1 and Sh 545-B Detail 2 specify 3/16" fillet welds to be welded on one, two or three sides. All of these welds have been welded "all around".
(Contd on Page 3)

5. DISTRIBUTION AGENCY COPY:
LADreisbach
- INFO COPY:
- | | |
|-------------|-----------|
| WLBarelay | DBMiller |
| WRBird | WGHering |
| TCCooke | JENawgen |
| JLCorley | RASimanek |
| RHermeston- | DATaggart |
| SHHowell | RBCherba |
| DRJohnson | EDNewman |
| GSKeeley | JWCook |
| BWMarguglio | LEDavis |
| PAMartinez | PKHansen |
| IMilandin | RLSixford |

13. CA RECOMMENDATION FOR PART CA:
1. Process deviation in accordance with paragraph 6.2.7 of C-304.
 2. Provide documentation upon completion of corrective action.
 3. Request design clarification of weld symbols and weld requirements for welds in question as outlined in block 12.
- DESIGN/PROJECT ENG. DISPOSITION REQUIRED NOT REQUIRED

14. WELD TAGS APPLIED: YES NO FINGER, LOCATION & TYPE OF WELD TAGS APPLIED: **NA**

15. IS PROCESS CA REQUIRED: YES NO IF NO, ENTER JUSTIFICATION BELOW:

16. DOES IT AFFECT Q-LIST ITEMS: YES NO

17. IS IT REPORTABLE PER 50.55(*): YES NO

18. IS IT REPORTABLE PER PART 21: YES NO

19. IF YES, DATE & TIME OF REPORT TO REG: **NA**

20. IF YES, WHO MADE REPORT TO REG: **NA**

21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: **NA**

22. APPROVED BY: *[Signature]*

23. WRITTEN REPLY DATED BY: **7-6-79**

24. SUPERVISOR'S SIGNATURE/DATE: *[Signature]* **6/24/79**

TO ESTABLISH CA COMPLETION DATE

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:
7/7/80 -- Additional 3/16" fillet welds approved by FWE on QCIR C-304-799 Rev 1 and accepted by QCE prior to final acceptance.

26. DESIGN/PROJECT SIG. AUTH. DESP.: N/A	27. NO SIG. AUTH. DESP.: N/A	28. PROGRESSIVE SIG. AUTH. DESP.: N/A	29. SIG. OF REG. RESP. FOR Q/A: See letters LAD-1074 and LAD-1565
30. FAB/CONST. SIG. AUTH. DESP.: N/A	31. SIG. OF TEST GROUP APPROV. CONDITION: N/A	32. FOR WALKER MCD - FILE SUPP. SIG. AUTH. DESP.: N/A	33. CA AUTH. SIG. TO DOCUMENT DESP.: <i>[Signature]</i>

34. METHOD OF PART CA VERIFICATION:
Inspected additional welds with FWE and QCE and found welds to be acceptable. Reviewed QCIR C304-799 Rev 1.

35. SIG. OF REG. RESP. FOR PART CA DISMISSING COMPLETION: **See letters LAD-1074 and 1565**

36. SIG. VERIFYING PART CA & WELD TAG REMOVAL DATE: *[Signature]* **7/7/80**

37. SIGNATURE VERIFIED BY DATE: *[Signature]* **7/7/80**

38. PART & PROCESS CA COMPLETE:



Consultants
Power
Company

NONCONFORMANCE REPORT

PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -

QUALITY ASSURANCE DEPARTMENT

M-01-4-9-063

NCR SERIAL NUMBER:

PAGE 2 OF 3

18. CA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined,

19. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Spec C304 did not allow for additional welds in all areas to be accepted by FWE.

20. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER

21. CA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

22. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 20 - DATE OF COMPLETION:

FCR C-2359 and SCN C304-10002 issued to allow FWE to accept additional welds prior to final acceptance in areas of Spec C304 as necessary. See letters LAD-1074 and 1565, 7 July 1980.

23. METHOD OF PROCESS CA VERIFICATION:

Reviewed FCR-2359 and SCN C304-10002 for completeness and implementation at jobsite.

24. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

See letters LAD-1074 and 1565

25. PROCESS CA COMPLETION VERIFIED BY/DATE:

[Signature] 7/7/80

NCR SERIAL NO: M-01-4-9-063

DATE: 6-22-79

DATE OF REV: Closed 7-7-80

FILE NO: 16.3.4

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

(Contd from Page 1)

E-42(Q) Sh 541-C, Detail 4 specifies 3/16" fillet welds on one and both sides of angle clips. All of these clips have been welded "all around".



CONSUMERS
POWER
COMPANY

Midland Project: P.O. Box 1963, Midland, Michigan 48640 - Area Code 517 631-0951

November 9, 1979

Mr L A Dreisbach
Bechtel Power Corp
PO Box 2167
Midland, MI 48640

MIDLAND PROJECT - BPCo LETTER LAD-1074
File: 16.3.4 Serial: 383FQA79

JLC	<i>JLC</i>
DRK	<i>DRK</i>
RGW	<i>W</i>
PRK	<i>K</i>
DDB	<i>DDB</i>
QE	
FILE	

The subject letter contained Bechtel's complete response to CPCo NCR M-01-4-9-063 which related to additional welds in electrical supports and the acceptance criteria. Contents of the subject letter addressed the CPCo QA concerns and recommended corrective action (Block 13).

The reply in subject letter stated in part, "The additional 3/16" fillet welds on the remaining sides are approved on QCIR C-304-799 Rev 1."

The originator of the CPCo NCR, in the closing process, has determined these additional welds cannot be approved by the field engineer and accepted by the QCE. This determination is based on paragraph 6.2.7 of Spec C304(Q) Rev 5, which relates to welds in structural steel and miscellaneous metal only and does not include welds in electrical supports and equipment, including the connection to the building structure, as outlined in paragraph 6.3.

This determination is further supported by a conference discussion with a BPCo Civil Resident Engineer, who requested and received clarification from Engineering in Ann Arbor.

CPCo QA is unable to close out the NCR based on the above findings.

Additionally, it is requested that welds of this condition be reinspected and re-evaluated based on the above situation.

Please respond to this correspondence by 10 December 1979.


J L Corley
Section Head - IE&TV, Midland

JLC/JLZ

CC WRBird
TCCooke
GSKeeley

BUMarguglio
DBMiller

CONSUMERS POWER COMPANY
RECEIVED
 JUL 2 1980
 FIELD QUALITY ASSURANCE
 MIDLAND, MICHIGAN

Bechtel Power Corporation

Post Office Box 2167
 Midland, Michigan 48640

May 27, 1980



9LZ
 16.3.4

Consumers Power Company
 P. O. Box 1963
 Midland, MI 48640

Attention: J. L. Corley

Job 7220 Midland Project
 CPCo NCR MO1-4-9-063
 CPCo Letter 383FQA79
 Complete Response
 LAD-1565 Action Item S-2

Dear Mr. Corley:

Reference: Bechtel Letter LAD-1074, dated 8/30/79
 L. A. Dreisbach to J. L. Corley

The subject NCR and letter concern welded connections on electrical type 541 and 545 supports not conforming to design criteria established in Drawing E-42.

Field Change Request C-2359 and Specification Change Notice C-304-10002 have been approved and issued to clarify present wording and interpretation of Specification 7220-C-304(Q). This Specification Change Notice changes the wording in Paragraph 6.3 and 6.4 to require Field Engineering approval of additional welds prior to final acceptance.

The additional welds identified in subject NCR were approved by Field Engineering prior to final acceptance and are satisfactory.

If you need additional information, please contact M. A. Dietrich of this office.

Very truly yours,

L. A. Dreisbach
 Project Quality Assurance
 Engineer

LAD/HAD/sjc

cc: W. Bird
 B. Marguglio
 D. Miller

CONSUMERS POWER COMPANY
RECEIVED
JUN 4 1980

Bechtel Power Corporation

J
GLZ
16.3.4

Post Office Box 2167
Midland, Michigan 48640



FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

May 27, 1980

Consumers Power Company
P. O. Box 1963
Midland, MI 48640

Attention: J. L. Corley

Job 7220 Midland Project
CPCo NCR MO1-4-9-063
CPCo Letter 383FQA79
Complete Response
LAD-1565 Action Item S-2

Dear Mr. Corley:

Reference: Bechtel Letter LAD-1074, dated 10/3/79,
L. A. Dreisbach to W. L. Barclay

The subject NCR and letter concern welded connections on electrical type 541 and 545 supports not conforming to design criteria established in Drawing E-42.

Field Change Request C-2359 and Specification Change Notice C-304-10002 have been approved and issued to clarify present wording and interpretation of Specification 7220-C-304(Q). This Specification Change Notice changes the wording in Paragraph 6.3 and 6.4 to require Field Engineering approval of additional welds prior to final acceptance.

The additional welds identified in subject NCR were approved by Field Engineering prior to final acceptance and are satisfactory.

If you need additional information, please contact M. A. Dietrich of this office.

Very truly yours,

L. A. Dreisbach
Project Quality Assurance
Engineer

LAD/MAD/sjc

cc: W. Bird
B. Marguglio
D. Miller

CONSUMERS POWER COMPANY
RECEIVED
SEP 4 1979

FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

Consumers Power Company
P. O. Box 1963
Midland, MI 48640

Attention: J. L. Corley

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640

August 30, 1979



Job 7220 Midland Project
CPCo NCR #M-01-4-9-063
Complete Response
LAD-1074 Action Item-S-2

Dear Mr. Corley:

The subject NCR concerns welded connections on a electrical type 541 and 545 supports not conforming to design criteria established in drawing E-42.

An investigation of the subject concerns revealed the following information:

- 1) The connection shown in E-42 Sheet 545-A Detail 1 was made using the specified welds for the attachment of the 6" X 6" X 3/8" plate, a 1/2" X 3" long fillet weld on each of three sides and a 3/16" X 6" long flare bevel weld on the remaining side. (The 6" in place of the 3" weld is acceptable per 7220-C-304 Section 6.3.1).

The attachment of the 4" X 4" X 1/4" angle steel is made with the specified 3/16" fillet welds on two sides. The additional 3/16" fillet welds on the remaining sides are approved on QCIR C-304-799 Rev. 1. Therefore, no nonconformance exists on this connection.

- 2) E-42 Sheet 541-C Detail 4 and Sheet 545-B Detail 2 are identical. These details require a 3/16" fillet weld on each of the four (4) sides and each end of the 3" X 3" X 1/4" X 2 1/2" angle steel. When built to these details the weld appears the same as an "all-around" weld, therefore, no nonconformance exists with these connections.

If further assistance is necessary, please contact the writer.

Very truly yours,

R. C. Hollen for

L. A. Dreisbach
Project Quality Assurance
Engineer

JLC	
DRK	
RGW	
PRK	
VDB	<i>[Signature]</i>
JLC	<i>[Signature]</i>
QE	
FILE	

LAD/RCH/bsm
cc: W. Bird
B. Marguglio



FIELD CHANGE REQUEST

PAGE 1 OF 1
FCR NO.

C-2359

JD
2-8
Rec'd

JOB NO. 7220	DRAWING OR SPECIFICATION NO. 7220-C-304(Q)	SHEET NO.	REV SYM. 7	Q ITEM YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	TITLE OF DRAWING OR SPEC. <u>TECH. SPEC FOR FIELD FABRICATION, REPAIR & ERECTION OF STRUCTURAL STEEL & MISCELL. METALS</u>
CHANGE PROPOSED FCR <input checked="" type="checkbox"/>	PREPARED BY AND DATE K Bishop 2/6/80	CHANGE APPROVED YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	PFE SIGNATURE AND DATE <i>J.P. [Signature]</i> 2/6/80	DISPOSITION OF FCR REQUIRED BY DATE 3/1/80	

REASON FOR CHANGE: TO CLARIFY PRESENT WORDING AND INTERPRETATION OF THIS SPECIFICATION.

EXISTING CONDITION: SECTION 6.2 LISTS EXCEPTIONS AND CLARIFICATIONS WITH REFERENCE TO SECTIONS 6.3 AND 6.4 FOR FURTHER SPECIFIC EXCEPTIONS; SECTION 6.2.7 STATES "ADDITIONAL WELDS NOT SHOWN ON THE DRAWING, OTHER THAN THOSE SPECIFIED IN SECTIONS 6.2.5 AND 6.2.6, REQUIRE FIELD ENGINEERING APPROVAL PRIOR TO FINAL ACCEPTANCE."

DESCRIPTION OF CHANGE: ADD THE FOLLOWING SUB-PARAGRAPH TO SECTIONS 6.3 AND 6.4

ADDITIONAL WELDS NOT SHOWN ON THE DRAWING, OTHER THAN THOSE SPECIFIED IN SECTIONS 6.3.10 AND 6.4.16

REMARKS: ~~REVISION~~ ^{REVISION} ~~REQUIRE~~ ^{REQUIRE} FIELD ENGINEERING APPROVAL PRIOR TO FINAL ACCEPTANCE.

7220
Job/Sub: VA
Doc. Type: 2541 Qty. 1
Assigned to: DJP
Task: 52 Due Date: 4/9/80

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APR 18 1980

BECHTEL POWER CORP.
JOB 7220 CG

INTERIM APPROVAL BY SIGN: N/A AAO CONTACT: DATE: N/A
RESIDENT ENGINEER: DATE: N/A NAME: N/A

OTHER DWGS OR SPECS AFFECTED	CIVIL	ELECTRICAL	INSTRUMENTATION	MECHANICAL	PIPING	WELDING OR OTHERS
	N/A	N/A	NA	NA	NA	
CHECKED BY FIELD LDE	<i>J. [Signature]</i>	<i>am</i>	↓	↓	↓	K Bishop
CHECKED BY PE GR SUPV	<i>10. [Signature]</i>	<i>BR</i>	↓	↓	↓	<i>8/14/80</i>

FCR APPROVED YES NO PROJECT ENGINEER SIGNATURE AND DATE: *M. [Signature]* 4/11/80

REMARKS: PROJECT ENGINEER CONCUR AND SPECIFICATION TO BE REVISED. F.L.
D. [Signature] 3/19/80



FOR DISTRIBUTION WITHIN BECHTEL ONLY

DOCUMENT REVIEW FORM
MATERIALS AND QUALITY SERVICES
RESEARCH AND ENGINEERING

LETTER FILE NO. DJP-040-02

PROJECT <u>MIDLAND</u>			
JOB NO. <u>7220</u>	SUB NO. <u>001</u>	LOG NO. <u>2541</u>	TASK CODE <u>52</u>

DATE 4-8-80

Review Documents to be
 Returned to Filed
Requestor

TO L. H. CURTIS FROM (Reviewer) PUCHY EXT 7031

SUPPLIER & DIVISION BECHTEL SUB-SUPPLIER —

REFERENCES REC'D FROM PROJECT COPIES TO M. MILLS W/A
4-2-80 SFHO

APPLICATION FIELD FAB & REPAIR & ERECT MISC METALS FILE

SPEC NO/REV. 7220-C304 (Q) REU-7

CODE AWS D1.1 CLASS — REV or YEAR 79 S/W ADDENDA —

DOCUMENT REVIEWED	TITLE <u>FCR</u>
	NO/REV/DATE <u>FCR C 2359 3-1-80</u> doc typ# <u>FCR</u>

PROJECT DOCUMENT NO. 7220-C304(Q) REU-7

COMMENTS:

RECOMMENDATION:

- 1. WORK MAY PROCEED
- 3. WORK MAY PROCEED, If Comments Incorporated
- 4. WORK MAY NOT PROCEED See Comments With *
- 5. OTHER See Comments

STD. COMMENTS

--	--	--	--	--	--	--	--	--	--

UNCONTROLLED
NOT TO BE USED
FOR CONSTRUCTION



Consumers Power Company

NONCONFORMANCE REPORT

PAGE 1 of 3

6. PROJECT NAME: Midland		7. DISCREPANCY PART NO: FW-25 and 26		8. DISCREPANCY PART TAG: 1-HBC-196-2		1. FILE NO. (SEE PART 1): 12-01-5-9-142	
9. SERIAL NUMBER: 1-HBC-196-2		10. SER. COMPANY NO: Bechtel Construction		11. AREA/LOC. OF SER: Battery Room		2. DATE: 12-19-79	
12. "AS IS" DISCREPANCY CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: Requirements per Bechtel chart for fillet weld size indicates 1/4" weld size for sch-40 and sch-80 1 1/2 and 2" diameter pipe.				12. AREA/LOC. OF SER: Elevation 614		3. DATE OF REP: Closed 7-2-80	
13. "AS IS" DISCREPANCY CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: Contrary to the above field welds, FW-25 and FW-26 on Line 1-HBC-196 measured 3/16 or less. These welds were subjected to ASME III pressure test without being evaluated relative to undersize condition identified on CPCo NCR M-01-4-9-071 which is still open.						4. FILE NO: 16.3.4, 16.3.6	
14. "AS REQUIRED" FOR PART NO: 1. Prevent further insulation work on the identified welds. 2. Remove identified discrepant welds from the scope of pressure test GJ-CT-2-PT-1-RT-2 pending resolution of the discrepancy.						5. DISTRIBUTION ACTION COPY: LADreisbach	
15. "AS REQUIRED" FOR PART NO: 1. Prevent further insulation work on the identified welds. 2. Remove identified discrepant welds from the scope of pressure test GJ-CT-2-PT-1-RT-2 pending resolution of the discrepancy.						6. INFO COPY: WBarclay BWMarguglio WRBird JMilandin RBCherba DRMiller TCCooke(2) RLRixford JLCorley JARutgers LEDavis RASimanek PKHansen DATaggart SHHowell JWCook DRJohnson GSKeeley	
16. HOLD TAGS APPLIED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		17. NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: One (1) Bechtel hold tag on elbow to which welds are made.					
18. IS PROCESS CA REVIEWED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		19. IF YES, DATE & NAME OF REPORT TO SER: NA					
20. DOES IT AFFECT 4-1011 ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		21. IS IT REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>					
22. IS IT REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		23. IF YES, WHO MADE REPORT TO SER: NA					
24. IF YES, DATE OF SER OFFICIAL TO WHOM REPORTED: NA		25. WHO OBSERVED BY: Harold T. Allen		26. WITNESS REPLY DATED BY: 1-10-80		27. SUPERVISOR'S SIGNATURE/DATE: DRKesting 12-19-79	
28. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE: 1. Verified by dimensional inspection that Field Welds, FW-25 and FW-26 were repaired in accordance with Spec 7220-6-27 requirements, and letter LAD-1379. 2. Witnessed Pressure Test GJ-CT-2-PT-1-RT-3, FPB-1.100(Q) 6/27/80. 3. Reviewed final Test Record 7/1/80.							
29. FIELD/PROJECT SER. ACTION COPY: NA		30. SER. NO SER. ACTION COPY: NA		31. DISCREPANCY SER. NO. SER. COPY: NA		32. SER. NO. SER. COPY FOR FINAL: Letter LAD-1379 Final Test Record	
33. PART/CONST. SER. ACTION COPY: Letter LAD-1379		34. SER. NO. OF TEST GROUP ACTION COPY: NA		35. SER. NO. SER. COPY FOR SER. ACTION COPY: NA		36. SER. NO. SER. COPY TO DOCUMENTATION: Harold T. Allen	
37. METHOD OF PART CA VERIFICATION: Verified Field Welds FW-25 and FW-26 were repaired by visual and dimensional inspection.							
38. SER. NO. SER. COPY FOR PART CA VERIFYING COMPLETION: Final Test Record, Letter LAD-1379		39. SER. NO. VERIFYING PART NO & SER. NO. REMOVAL DATE: Harold T. Allen 6/27/80		40. SER. NO. SER. COPY FOR PART CA: Harold T. Allen 7/2/80			



Consumers
Power
Company

NONCONFORMANCE REPORT

PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

SEE SERIAL NUMBER M-01-5-9-142

PAGE 2 OF 3

18. CA ASSESSMENT OF ROOT CAUSE(S):

Welds FW-25 and 26 on Line 1-HBC-196 were not identified as being undersize and requiring repair along with other associated welds on the same line.

19. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Same as Block #38.

20. PROCESS CA DERIVED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER _____

21. CA RECOMMENDATION FOR PROCESS CA:

1. Provide process corrective action to cause welds to be properly made.
2. Provide process corrective action relative to the inspection of socket welds.

22. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK #1 & DATE OF COMPLETION:

1. As indicated in letter LAD-1379.
2. Review Final Test Record.

23. METHOD OF PROCESS CA VERIFICATION:

1. Verified craft welders have been issued pipe/weld size chart.
2. Reviewed training session roster.
3. Verified weld size.

24. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA VERIFYING COMPLETION:

Letter LAD-1379
Completed Test Package GJ-CT-2-PT-1-RT-3

FPB-1.100

25. PROCESS CA COMPLETION VERIFIED BY (DATE):

Harold L. Allen 7/2/80

NCR SERIAL NO: M-01-5-9-142
DATE: 12-19-79
DATE OF REV: Closed 7-2-80
FILE NO: 16.3.4, 16.3.6

13. QA RECOMMENDATION FOR PART CA:

(Contd from Page 1)

3. Increase weld size to 1/4" on FW-25 and FW-26, Line 1-HBC-196.

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 FEB 2 1980
 FIELD QUALITY ASSURANCE
 MIDLAND, MICHIGAN

Bechtel Power Corporation

Post Office Box 2167
 Midland, Michigan 48640



February 21, 1980

Consumers Power Company
 P. O. Box 1963
 Midland, MI 48640

Attention: J. L. Corley

Job 7220 Midland Project
 CPCo NCR M-01-5-9-142
 Complete Response
 LAD-1379 Action Item-S-189

Dear Mr. Corley:

Socket welds, 25 and 26 on line LHBC-196, have been dispositioned on Bechtel NCR 2835 and will be repaired in accordance with the NCR resulting in the welds meeting the requirements of ASME Section III and applicable job specifications.

Bechtel NCR 2835 also requires welds 25 and 26 on line LHBC-196 be retested after repair.

To prevent repetition of this problem Field Engineering has issued a chart to be used by the craft welders and Quality Control Welding Engineers for fillet weld size. Craft welders have been instructed in the requirements of socket weld sizes.

Quality Control Welding Engineers have been trained relevant to socket welds, the measurements of socket welds, and the use of the chart for correct weld size which includes pipe to fittings and pipe to flange socket welds.

Very truly yours,

L. A. Dreisbach

L. A. Dreisbach
 Project Quality Assurance
 Engineer

LAD/MAD/bss

cc: W. Bird
 B. Marguglio
 D. Miller

JLC	DRK
DRK	DRK
RGW	
PRK	
DDB	
XHLA	LA
QE	
FILE	



NONCONFORMANCE REPORT

6. PROJECT NAME: Midland	7. NONCONFORMING PART NO: Pump Nos 1P51A & 1P51D	8. NONCONFORMING PART NAME: Pump Casing	1. NCR SERIAL NO: M-03-4-0-035
9. SERIAL NUMBER: NA	10. ORG. COMMITTEE NO: B&W Lynchburg	11. AREA/LOC. OF NC: Containment #1	2. DATE: 5-1-80
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:			3. DATE OF REV: 5-19-80 Closed 7/11/80
1. The qualification document for the Byron Jackson welder who made the repairs is dated February 10, 1976. No evidence of <u>current</u> certification has been supplied as requested.			4. FILE NO: 16.4.1
2. A notarized certificate of weld filler material has not been supplied as requested.			5. DISTRIBUTION ACTION COPY: CEMahaney B&W - Lynchburg, VA
3. Byron Jackson form P512 covering the subject filler material has not been supplied as requested.			
NOTE: The above nonconforming conditions resulted from the repair welding of the sealing flange on the subject pumps. <p style="text-align: right;">(Contd on Page 3)</p>			

- INFO COPY:
- WRBird
 - REcherba
 - TCCooke(2)
 - JLCorley
 - LADreisbach
 - HGUetling
 - GSKeeley
 - BWMarguglio
 - JMilandin
 - DBMiller
 - RWShope

13. QA RECOMMENDATION FOR PART CA:
Provide the requested documentation.

DESIGN/PROJECT ENG. DISPOSITION REQUIRED NOT REQUIRED

14. HOLD TAGS APPLIED: YES NO NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED:
Two (2) - One on each pump driver mount.

15. IS PROCESS CA REQUIRED: YES NO IF NO, ENTER JUSTIFICATION BELOW:
The process has been completed, therefore, no action is possible.

16. DOES NC AFFECT Q-LIST ITEM: YES NO

17. IS NC REPORTABLE PER 50.55(*): YES NO

18. IS NC REPORTABLE PER PART 21: YES NO

19. IF YES, DATE & TIME OF REPORT TO NRC: **NA**

20. IF YES, WHO MADE REPORT TO NRC: **NA**

21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: **NA**

22. NCR ORIGINATED BY:
R.O. Rafferty

23. WRITTEN REPLY REQUIRED BY: **5-15-80**
TO ESTABLISH CA COMPLETION DATE

24. SUPERVISOR'S SIGNATURE/DATE:
DRKesting 5-1-80

25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE:
See Attachments 1 and 2 for Item 1 Block 12
See Attachment 2 for Item 2 Block 12
See Attachment 3 for Item 3 Block 12
See Attachment 4 for Item 4 Block 12
See Attachments 5 and 6 for Item 5 Block 12

26. DESIGN/PROJECT SIG. AUTH. DISP.: N/A	27. PMO SIG. AUTH. DISP.: N/A	28. PROCUREMENT SIG. CONC. DISP.: N/A	29. SIG. OF ORG. RESP. FOR C/A: See Attachments
30. FAB/CONST. SIG. AUTH. IMP. DISP.: N/A	31. SIG. OF TEST GROUP ACKNOW. CONDITION: N/A	32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: N/A	33. QA AUTH. SIG. TO IMPLEMENT DISP.: <i>R.O. Rafferty</i>

34. METHOD OF PART CA VERIFICATION:
Reviewed Attachments

35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: See Attachments	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: <i>R.O. Rafferty 11/11/80</i>	37. NCR CLOSED BY/DATE: (PART & PROCESS NC COMPLETION) <i>R.O. Rafferty 11/11/80</i>
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Consumers
Power
Company

NONCONFORMANCE REPORT

PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-03

PAGE 2 OF 3

38. QA ASSESSMENT OF ROOT CAUSE(S):

To be determined later.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

N/A

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

ORDER

41. QA RECOMMENDATION FOR PROCESS CA:

N/A

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

N/A

43. METHOD OF PROCESS CA VERIFICATION:

N/A

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

N/A

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

R. O. Rafferty 11 JUL 80

NCR SERIAL NO: M-03-4-0-035
DATE: 5-1-80
DATE OF REV: 5-19-80 Closed 7/11/80
FILE NO: 16.4.1

12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS:

(Contd from Page 1)

4. The Engineering rationale for not repairing all of the nonconforming areas on the pump sealing surfaces has not been provided.
5. Prior weld repaired areas on the pump sealing surfaces must be dispositioned satisfactorily including, but not limited to, the following:
 - (a) Identification of the weld procedure
 - (b) Identification of the weld filler material
 - (c) Certification of the welder or welders
 - (d) Identification of the NDE procedures
 - (e) Results of the NDE

AND CONSTRUCTION
DEPARTMENT
SERIAL NUMBER: M-03-
PAGE 2 OF 3

BYRON JACKSON PUMP DIVISION
 BORG-WARNER CORPORATION.
 LOS ANGELES OPERATION

MANUFACTURER'S RECORD OF WELDER QUALIFICATION TESTS

Welder's Name E. Romero Clock No. 9750 Stamp F
 Welding Process GTAW Type Manual
 In accordance with Welding Procedure Specification See Key Number 17 (1T-3664)
 Backing (QW-402) None
 Material (QW-403) Spec. No. ASTM A-240 Tp. 304 to Same
 P No. 8 to P No. 8
 Thickness Range 1/16 to 3/4 Diameter Range NA
 Filler Metal (QW-40) Spec. No. AWS A5.9 Class ER 308 F No. 6
 Other NA
 Position (QW-405) 2G Horizontal
 Electrical Characteristics (QW-409) Current Direct Polarity Straight
 Weld Progression (QW-410) NA

FOR INFORMATION ONLY

Filler Metal Diameter and Trade Name 3/32 inch Johnston
 Flux for Submerged Arc or Gas for Inert Gas Shielded Arc Welding Argon

GUIDED BEND TEST RESULTS

Type and Figure No.	Result	Type and Figure No.	Result
NA			
NA			
NA			

Radiographic results: For alternative qualification of groove welds by radiography in accordance with QW-304 and QW-305 Satisfactory

Tests Conducted by Byron Jackson Pump Division Laboratory No. _____
 per ASME Code Section IX

We certify that the statements in this record are correct and that the test welds were prepared, welded, and tested in accordance with the requirements of Section IX of the ASME Code.

Signed Byron Jackson Pump Division

Date 10 February 1976 By D. S. Shaw

To File 16.0
FROM DRKeating, Midland
DATE July 2, 1980
SUBJECT MIDLAND PROJECT - BYRON-JACKSON TRIP REPORT
File 16.0 Serial 177FQA80

Consumers
Power
Company

INTERNAL
CORRESPONDENCE

CC WRBird, JSC-216B DBMiller, Midland
TCCooke, Midland PMO BHPeck/DAKarjala, Midland PMO
JLCorley, Midland QA JBPost, M-665B
GSKeeley, P-14-408B GBSzczotka, QA-NO

The Byron-Jackson (B-J) Offices were visited on May 14, 1980 for the purposes of verifying completion of action items from the September 13, 1980 site meeting on the reactor coolant pumps and corrective action on documentation for CPCo QA NCR M-03-4-0-035. Mr E DeCarli, QA Manager for B&W NPCD, accompanied the writer during the visit.

Upon arrival, an introductory meeting was held with the following personnel in attendance:

<u>Name</u>	<u>Company</u>	<u>Title</u>
C Boster	B-J	Assistant Manager of Engrg
J Calcagno	B-J	Project Manager
E DeCarli	B&W	QA Manager
D Ham	B-J	Manager of Quality Assurance
A Jones	B-J	Manager Quality Control
D Keating	CPCo	Section Head - IE&TV

The purpose of the visit was discussed. The meeting then broke and verification activities began. During the course of the verification activities, the shop floor was toured.

The results of the verification on the September 13, 1980 meeting action items are as detailed below. All seven action items are listed even though action on some was previously done at the Midland Site.

ACTION ITEMS

1) Proof Test Revision

B-J is to revise the proof test procedure to have 150% of residual load as the proof test load. The proof test load then will be approximately 839,000 lbs. The load test will be held for one minute as previously specified and then the load will be reduced to the normal loading.

The procedure is to be revised by 9/21/79.

ACTION ITEMS

1) (Contd)

VERIFICATION

Previously done in field. The proof test procedure was reviewed and the proof test observed by CPCo QA.

STATUS

This item is complete.

2) B-J is to comment, in the record, on load sharing characteristics of stud (upper vs lower). This action is to be done by 9/21/79.

VERIFICATION

Reviewed Report No GS-1539, Documentation of Load Distribution in a Threaded Hole with Axially Loaded Stud for Babcock and Wilcox Co Midland Project 691-N-0041, dated 3-28-80. The report is available in the engineering files and indicates that approximately 88% of the stud preload is on the upper four inches of case threads.

STATUS

This item is complete.

3) B-J is to include proof test rationale in a revised pump stress report. This action is to be done by 11/15/79.

VERIFICATION

Reviewed B-J Procedure No SR-100801 dated 1-3-80, "Supplement to the Bolted Joint Analysis (TCF-1023-STR)" for Babcock and Wilcox Co Midland Project 691-N-0041/48 dated 1-3-80. B-J had submitted the supplement to B&W for approval. B&W had not yet approved the supplement. This report is available in the engineering files.

STATUS

This item is open pending verification of approval by B&W.

4) B-J (Lucas) will initiate internal corrective action. Lucas and CPCo are to coordinate and B-J will provide a copy to B&W.

VERIFICATION

a) Reviewed the QA Alert (#122, dated 11-7-79) to perform visual examination of the full depth and circumference of the threaded holes for inconsistency of the minor diameter; damaged and missing threads; and irregular form or shape of threads. The QA alert was available.

ACTION ITEMS

4) VERIFICATION (Contd)

- b) Based on a review of the QA Alert, routing sheets, shop floor activities, and Quality procedures, an assessment of the corrective action effectiveness was made. It was the conclusion of the writer, and with which Mr DeCarli of B&W agreed, that the corrective actions taken do not provide adequate assurance that similar type discrepancies would not recur. It is noted that the QA Alert is not proceduralized, distribution of it was found to be nebulous, and shop route sheets do not call for the specific inspections detailed in a) above. The route sheets call for inspection at various points in the manufacturing process. B-J indicates that the inspector knows what to inspect based on the manufacturing operation (or operations) on the route sheet and his training and experience. Additionally, it was evident that B-J Quality Procedure 39 "Corrective Action" would have been appropriate to implement for the discrepancy involved. When queried as to why the procedure was not implemented, B-J indicated that it only would have generated additional paperwork with the same corrective action. B-J is considered to have circumvented a procedural requirement.

STATUS

B-J has completed the corrective action to which they committed and, therefore, this item is complete relative to the Midland reactor coolant pump fabrication. Purchase of spare parts and future orders for other pumps should not be made without further analysis and improvements to the inspection program.

- 5) a) B-J to review drawings the week of 9/17/79 and provide by 9/27/79 any additional information to the field that will make installation/assembly easier and preclude problems.

VERIFICATION

Previously done in field. Midland Special Assembly Instructions were received and reviewed.

STATUS

This item is complete.

- b) Upon completion of all eight pumps, B-J will revise manuals to incorporate detail provided in 5) a) above.

VERIFICATION

Not applicable at this time. It was confirmed with B-J that the Midland Special Assembly Instructions would be the items to be placed in the manuals.

STATUS

This item will remain open until the manuals are revised.

MIDLAND REACTOR

ACTION ITEMS

- 6) B-J is to provide plug gauge dimension for stud holes and any pertinent information for use of the gauges. The purpose of this information is to confirm minor diameter dimension.

VERIFICATION

A demonstration of the use of a plug gauge was witnessed on the shop floor. The demonstration was satisfactory and corresponded to the use described in B-J internal memorandum from P Allagoa to E A Dovidio dated 10-17-79. A review of calibration records for the particular plug gauges used for the Midland pump casings show the "Go" gauge to have been calibrated and with the 4.668 inch pitch diameter stated in the above referenced letter. A review of the "No-Go" gauge records showed the item to have been in calibration but with a pitch diameter of 4.6782 inches rather than the 4.6810 as was stated in the above referenced letter. The required pitch diameter for the size threads involved is 4.6688 inches. Thus, plug gauge use is acceptable and the correct pitch diameter was confirmed.

STATUS

This item will remain open pending correction of the pitch diameter for the "No-Go" gauge that is described in the 10-17-79 B-J letter.

- 7) B-J is to describe the B-J inspection program as to how and what is inspected.

VERIFICATION

The inspection was described in the B-J internal memorandum from P Allagoa to E A Dovidio dated 10-17-79. The verification was done in conjunction with the verification for Action Items 4) and 6) in which the inspection program and associated procedures were reviewed. The conclusion is that the B-J inspection program does not provide adequate assurance that the same or like discrepancies as were discussed in the September 13, 1980 meeting will not occur again.

STATUS

This item is considered complete for the Midland reactor coolant pump fabrication. The B-J inspection program should be analyzed and improved prior to purchase of spare parts or future pump orders.

Documentation relative to the resolution of CPCo QA NCR M-03-4-0-035 was reviewed while at the Byron-Jackson Offices. The NCR was initiated due to a lack of required documentation relative to weld repairs of the gasket sealing surface on reactor coolant pumps 1P-51A and 1P-51D. The discrepancies, verifications, and status are as described below.

1) Welder Certification

Discrepancy

No evidence of current certification of the welder was sent to the site. The only document received in response to the NCR is the original certification dated February 10, 1976.

Verification

Records kept by B-J to provide maintenance of welder qualifications showed that E Romero (Clock No 9750) had welded the GTAW process in February, April, May, July, October, and December of 1979 and February and March of 1980. These records were reviewed by the writer.

Status

This item is satisfactory.

2) Notary Statement

Discrepancy

There is an unsigned notary statement on the material test report for the filler metal used for the repair (Heat No 346822).

Verification

None. A notary statement is not required.

Status

This item is satisfactory.

3) Weld Filler Metal Control

Discrepancy

Form P512 that controls the traceability of the filler metal was not furnished as requested (B-J Procedure IT-3454).

Verification

Forms P512 were reviewed for the dates that E Romero withdrew weld rod for the repair. The form was properly completed and available. The required traceability and weld rod control was maintained.

Status

This item is satisfactory.

Following completion of verification activities, an exit meeting was held with the following personnel in attendance:

<u>Name</u>	<u>Company</u>	<u>Title</u>
JCalcagno	B-J	Project Manager
EDeCarli	B&W	QA Manager
DHam	B-J	Manager of Quality Assurance
A Jones	B-J	Manager Quality Control
D Keating	CPCo	Section Head - IE&TV
D Plapp	B-J	Project Management

The results of the verification activities as described above were presented. Byron-Jackson took exception to the provided assessment of their QA/QC program and indicated that a more thorough review of the program would provide the assurances that CPCo and B&W felt were lacking. Also discussed in general terms were the alleged unauthorized weld repairs to the pump casings. This item is being pursued at the site.

Copy Sheet

2012 11-3-80

DISTRIBUTION OF WELD FILLER METAL
RELEASE LOG

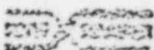
Date 11-3-80

SIZE	TYPE	HEAT NUMBER	WELDER NUMBER	AMOUNT # RELEASED	TIME	AMOUNT # RETURNED	TIME	JOB NUMBER	NCHR NUMBER	OP #	ROUTE CARD NUMBER	IT SHEET NUMBER
1/2	001	411 X 13	55001	30 Rod	10	320	10	70110010		50	109101	11-3-80
5/8	001	411 X 13	55001	10 Rod	10	27	10	70110010		50	109101	11-3-80
1/2	001	411 X 13	55001	1 Rod	25	42	1	70110010		50	109101	11-3-80
5/8	001	411 X 13	55001	1 Rod	40	42	1	70110010		50	109101	11-3-80
1/2	001	411 X 13	55001	1 Rod	30	42	1	70110010		50	109101	11-3-80
5/8	001	411 X 13	55001	1 Rod	55	32	13	70110010		196	109101	11-3-80
1/2	001	411 X 13	55001	1 Rod	10	96	2	70110010		50	109101	11-3-80
5/8	001	411 X 13	55001	1 Rod	45	42	1	70110010		50	109101	11-3-80
1/2	001	411 X 13	55001	1 Rod	16	3	1	70110010		50	109101	11-3-80
5/8	001	411 X 13	55001	1 Rod	130	0	0	70110010		196	109101	11-3-80
1/2	001	411 X 13	55001	1 Rod	25	42	1	70110010		50	109101	11-3-80

ATTACHMENT #3 TO CPRO NCR M-03-4-D-035

Byron Jackson Pump Division

P. O. BOX 2017 TERMINAL AVENUE, LOS ANGELES, CALIFORNIA 90001 - 211/537-6171



TELECOPY

20 May 1980

Babcock & Wilcox
Power Generation Group
P. O. Box 1266
Lynchburg, Virginia 24505

Attention: Mr. T. Walton

Subject: Midland RCP Case Repair
P. O. 035663LU

Reference: NCR M-02-40-035

Gentlemen:

The above NCR was received via telecopier 5/20/80. The "as is" condition vs. "as required" condition seems to need some clarification.

The qualifications of the Byron Jackson welder were current at the time he performed the weld repairs. His records were audited 5/14/80 by ESW/CPCo and found acceptable. Copies of our records were furnished at that time for your information.

No notarization is required by Code or P. O. on the certificate of weld filler metal. As discussed via telephone, the standard form used includes space for notarization when required.

Form P512 was reviewed by ESW/CPCo 5/14/80 and information copies were provided.

Page 2 of 3 of the NCR does not require any action by Byron Jackson. Page 3 of 3 is as follows:

4. Engineering Rationale:

The basic rationale imposed on subject repair is that the surfaces must not leak. Given the present condition of the surfaces, as discussed in several meetings prior to the repair including the findings of the ESW Research Center Team, it was the consensus of Byron Jackson that although the probability was low a possibility of leakage did exist. The field experience of our Service Division and sound engineering judgement was used to set the criteria for repair as provided in SK-0045-2 attachment, dated 12 March 80 (copy attached for your convenience).

MAY 21 1980



20 May 1980

Provided the gaskets seat properly, they will compress approximately .000" (.175 new, .125 compressed) at installation easily filling indications well in excess of the established criteria, .005". Sidesalls of the grooves do not contribute to the sealing, therefore can be disregarded. The observed indications are located radially, not radially where they could promote a leak path. The double gasket arrangement with its dividing annulus and bleedoff line is an additional consideration in providing a leak proof joint.

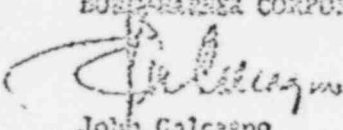
In summary, the need to repair specific indications was set by Byron Jackson to a confidence level at which we are comfortable, as the designers, in guarantying its integrity.

5. Prior weld repaired areas are not dispositioned or documented as a part of this repair. Original pump codes and specifications detail the weld repair records that are required as a part of the manufacturing process at the factory. Those records were all delivered along with the pumps at that time. Additionally, BW was furnished copies of route sheets and non-transforming material reports, as a part of the discussions at Alliance, which describe minor weld repairs performed in the shop. No additional documentation is available.

We trust the above answers all your concerns as well as those of CFCo regarding the acceptability of subject repairs.

Very truly yours,

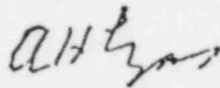
BYRON JACKSON PUMP DIVISION
BOB-WARNER CORPORATION


John Calcagno
Project Manager

JC/ah

3. Neither the B&W procurement specification nor the ASME Code requires that "minor weld repairs be documented (NB 2579.6). When the vendor (Byron-Jackson) documented the minor repairs on the "D" casing, they acted in a more conservative manner than required by the ASME Code or the B&W Procurement Specification. The lack of documentation for the repair of "minor" defects on the "A" casing did not violate the ASME Code of the B&W Procurement Specification.
4. The Alliance Research Center report documents three indications on Pump Casing 1P15A (Figures 11 and 12). These indications are approximately the size of a penny (about 3/4"). Since it is general practice to excavate a surface defect such that it blends into the surrounding metal at about 3/1 slope, the depth of the defect can be inferred to be approximately 1/8". Since this is considerably less than 3/8" depth specified in the Code as the minimum defect depth requiring documentation, these three indications can be classified as minor repairs, and as such do not require documentation.

Respectfully,



A. H. Lazar
Senior Project Manager

AHL:dcw

ATTACHMENT # 5-

Babcock & Wilcox

Power Generation Group

P.O. Box 1260, Lynchburg, Va. 24505

Telephone: (804) 384-5111

January 4, 1980

CPCO-2631

File: T1.2
12B
12E42
NSS-12/13

Mr. D. B. Miller, Site Manager
Consumers Power Company
PO Box 1963
Midland, Michigan 48640

Mr. R. C. Bauman
Consumers Power Company
1945 Parnall Road
Jackson, MI 49201

COPIES SENT TO BENTON
DATE 1-22 1980

Subject: Consumers Power Company
Midland Plant, Units 1 and 2
RC PUMPS FABRICATION RECORDS

Gentlemen:

The intent of this letter is to follow up on Action Item #1 from the December 6 Site Coordination Meeting Minutes covering the potential meeting at B-J to review the RC Pumps fabrication records.

To help you determine whether or not this meeting is desirable, attached herewith is a copy of a B-J letter to B&W dated December 14, 1979 transmitting key fabrication records of pump casings 1P51A and 1P51D. These records indicate that the casing machine surfaces were inspected and approved by B-J, BAPC and B&W. There are other detailed records at B-J to back up these summary sheets.

In an attempt to resolve the responsibility for the upcoming repair costs to re-machine these surfaces prior to cutting chips on these casings, we think a meeting should be conducted at B-J to review and satisfy all CPCO concerns with the fabrication of these pumps. This proposed meeting may be either a QA audit type meeting or a combined QA aud. and management review meeting.

Please advise your comments based upon this information at your earliest convenience.

Very truly yours,

C. E. Mahaney
C. E. Mahaney
Project Manager

CEM/hj

cc: GS Keeley w/att
TC Cooke w/att
WR Gillaspie w/att

For A. H. Lazar
Senior Project Manager

ATTACHMENT # 6 TO UCR M-03-4-0-035

C. E. Mahaney

Byron Jackson Pump Division

P.O. BOX 2017 TERMINAL ANNEX, LOS ANGELES, CALIFORNIA 90051 • 213/587 6171



14 December 1979

Babcock & Wilcox
Power Generation Group
P. O. Box 1260
Lynchburg, Virginia 24505

Attention: Mr. J. Becker

Subject: RCP Case Route Sheet Signatures

Reference: RCP Case S/N 691-N-0046 & 48

Gentlemen:

Attached please find Route Sheets D. O. D. Nos. 150933 and 150935 respectively, for your review. Please be advised the attached are only partial routings, they include only Pages 9, 10 and 12 with support forms attached.

The operations of significant concern have been highlighted in yellow and have been signed off by customer rep, Code rep, and ultimate user rep.

We trust the information contained herein is satisfactory for your immediate needs, and should you require additional information please do not hesitate to contact this office.

Very truly yours,

BYRON JACKSON PUMP DIVISION
BORG-WARNER CORPORATION

E. A. Dovidio
E. A. Dovidio
Project Manager

EAD/ah

Attach.

CPCO PROJECT
B&W - NPGD

JAN 3 1980

----- PA -----
----- CA -----
----- JSS -----

ATTACHMENT # 6

08/06/75	08/04/75	CLASS # 1-P.B.P.	PUMP CASE ASSY		037	01	000		6911004
HEAD ACT.	HEAD REV.	GENERAL NOTE	PART NAME		PAGE	LINE	SPLIT	START	JOB NUM.
08/06/75	07/11/75		0	220727					15093
BODY ACT.	BODY REV.	Heat No.	QTY. BREAK	PATTERNS/MACHINE FROM					PRODUCE
EO CODE	C	ASME SA-351 GR CF8M		0.000X 0.000X 0.000=					MDAYS =
	DRAW. REV.	RAW MATERIAL		ROUGH SIZE					PIECES

QTY.	DESCRIPTION AND INSTRUCTIONS	QTY.	OPERATION	TIME	DATE	PIECES
305	INSPECT <i>INSPECTION NOTE. SEE OFF. 300 FOR REC. INSP. CALL SIGN-OFF</i>	5503	INSP		4-28-76	1
	DISMANTLE HYDROTEST ASSY & DRAIN	2978	BU/HYDRO	.50 8.00	4/29/76	1
320	ARC-AIR OFF CUPS (SUCTION/DISCH) AT CASE WELDS.	2691	WELD-AFC	1.00 12.00	7/12/75	2
309	LIQUID PENETRANT INSPECT SECTION & DISCHARGE NOZZLE PER IT-4140	3661	REV. P (B-5 REF UNIT)	4.00 14.00	11-25-75	1
330	CHUCK WITH SUCT. NOZZLE UP & TRUE UP. FINISH MACHINE SUCT. NOZZLE & WELD PREP PER DET. X	3331	SCHEIS	2.00 9.71	5/3/76	3
4-12-76	REF MOIS 509461-330K					
335	INSPECT	5503	INSP		5/3/76	1
340	LOCATE ON COVER SIDE (SUCTION NOZZLE UP) & TRUE UP. FINISH MACHINE DISCHARGE NOZZLE & WELD PREP PER DETAIL Y	3031	MB-HORZ	6.00 16.00 2.10 8.00	9-19-76	4
4-19-76	REF MOIS 509461-340K					
345	INSPECT	5503	INSP		5-18-76	1
0	DEBURR AND BLEND ANY SUDDEN SHOULDERS - DO NOT GRIND WATERWAYS - SEE FOREMAN BEFORE PROCEEDING.	2396	CLN/BURR	.75 7.00		
355	INSPECT	5506	INSP		5-19-76	1
360	STEAM CLEAN	2997	NUC-CLN	.50 1.00		
365	LIQUID PENETRANT INSPECT ALL MACHINED SURFACES AND WELDMENTS PER IT-4140, REV H, CG-6! REQ'D. CUSTOMER WITNESS POINT-FINAL ACCEPTANCE INSPECTION	5510	INSP			
	*** OPERATION CONTINUED ON NEXT PAGE ***					

APPROVAL		SEP 18 1975		REVISION	
PRODUCTION	MET. LAB.	QUALITY ASSURANCE	PROCESS ENGR.	PRODUCTION	MET. LAB.

ATTACHMENT # 6

PC 5-19-76

ROUTE SHEET

CONTAINS NEW LOAD CENTERS

JJK33X38 DFSS UNIT SIZE		N	REF/CONF	LINKAGE	509461XX PART NO.	VPC SOURCE	80400 USAGE	000000 CUSTOMER NAME	69100046.00 JOB NUMBER			
08/06/75 HEAD ACT.	08/04/75 HEAD REV.	CLASS # 1-P.B.P. GENERAL NOTE			PUMP CASE ASSY PART NAME			037 PAGE	01 LINE	000 SPLIT	START	150933 DOD
08/06/75 BODY ACT.	07/01/75 BODY REV.	Heat No.	0 QTY. BREAK	220727 PATTERNS/MACHINE FROM			NEXT ASSY.		FINISH		PRODUCE MDAYS = 119 1 PIECES	
EO CODE	C DRAW REV.	ASME SA-351 GR CF8M RAW MATERIAL		0.000X 0.000X 0.000= ROUGH SIZE			PIECES		Drawn Material Length			

QTY	MACHINE	SEQU.	TIME	Date	Days	Empl
37	STEAM CLEAN	2997	NUC-CLN	.50	1.00	1 1855
375	RADIOGRAPHICALLY INSPECT SUCTION & DISCHARGE NOZZLE WELD PREPS PER IT-3661, REV F. R.S. SKETCH IT-4297, REV A. 9/15/76	5509	INSP			1 1855
	CUSTOMER WITNESS POINT DATE 6/2/76 (Bee Tree)					
	CUSTOMER SIGNATURE DATE 6/2/76 (Bee Tree)					
	CODE HOLD POINT					
	CODE INSP. SIGNATURE DATE 6/3/76					
385	INSPECT - RECORD AS BUILT DIM'S (ACTUAL) PER DWG NO. 28-13024 - TO BE RETAINED IN MASTER R/S FILE IN Q.A. DOCUMENTATION. CUSTOMER WITNESS POINT	5503	INSP			1 1855
	CUSTOMER SIGNATURE DATE 6/2/76 (Bee Tree)					
39	STEAM CLEAN & DETERGENT WASH, GRADE III WATER RINSE. USE NYLON OR STAINLESS STEEL BRUSHES NOT PREVIOUSLY USED ON NON-STAINLESS MAT'L PER IT-3750 REV II, Add 3. 9/15/76	2997	NUC-CLN	1.00	15.00	1 1855
	WASH INT & EXT SURFACES AS FOLLOWS (ROOM TEMP)	2997	NUC-CLN	.50	18.00	

*** OPERATION CONTINUED ON NEXT PAGE ***

APPROVAL		SEP 18 1976		REVISION	
PRODUCTION	MET. LAB.	QUALITY ASSURANCE	PROCESS ENG.	PRODUCTION	MET. LAB.
			QUALITY ASSURANCE		

ATTACHMENT # 6

ROUTE SHEET

PLANT 3

08/06/75

PAGE 12

CONTAINS NEW LOAD CENTERS

33X33X38 DFSS		N	REF/CONF	LINKAGE	509461XX	VPC	80400	0000000	691N0046
08/06/75	08/04/75	CLASS # 1-P.B.P.			PUMP CASE ASSY	037	01	000	153933
ACT	HEAD REV.	GENERAL NOTE			PART NAME	PAGE	LINE	SPLIT	JOB NUMBER
08/06/75	07/01/75	0			220727				153933
BODY ACT.	BODY REV.	QTY. BREAK			PATTERNS/MACHINE FROM				D.O.D.
TO CODE	C	A 5/4E SA-351 GR CF8M			0.000X 0.000X 0.000=	NEXT ASSY.			PRODUCE
	DRAW REV.	RAW MATERIAL			ROUGH SIZE	FINISH			HDAYS = 1
					PIECES	PIECES			1

QTY	DESCRIPTION	DATE	PIECES	REMARKS
5504	INSP			
5502	INSP	6/16/76		
5509	INSP	6/22/76		
2000	4.1.76			
2000	ASSY NUC	6/22/76		
5503	INSP	6/22/76		
9895	PNT BTH	6/24/76		
5508	INSP	7/16/76		

435 INSPECT - LIQ. PENT. INSP. WELDS PER IT-4140, Rev H. CG-61 Reg'd
 RE-STAMP R.T. MARKERS ON CASE - USE LOW STRESS
 PROOF STAMPS. B.J. X-RAY SUPERVISOR TO DRAW
 R.S.S. RECOPOS FROM Q.A. AND DIRECT STAMPING.

445 INSPECT - SUPERVISOR VERIFICATION OF STAMPING
 REQUIRED - SUPER. SIGN *Religso* DATE 6/22/76

450 CLEAN ALL CONTAMINATED SURFACES WITH NEW
 ACETONE AND WIPE WITH LINT FREE CHEESE CLOTH.

455 INSPECT - CHECK IDENTIFICATION & CLEANLINESS
 CUSTOMER WITNESS POINT
 CUSTOMER SIGN *Paul* DATE 6/25/76

460 PACKAGE FOR SHIPMENT PER IT-4001, REV. B.
 NOTE DO NOT SEAL CRATE UNTIL AFTER WITNESS.
 CUSTOMER WITNESS POINT (PACKAGING)
 CUSTOMER SIGN *Paul* DATE 6/29/76

465 INSPECT - HOLD POINT FOR FINAL RELEASE
 CUSTOMER RELEASE OF DOCUMENTATION REQUIRED
 CUSTOMER SIGN *Paul* DATE 7/1/76 PER TWX SHEET TO ROOM 7/1/76.
 CODE RELEASE OF DOCUMENTATION REQUIRED.
 CODE INSP. SIGN *Paul* DATE 7/16/76
 RETURN COMPLETED ROUTING TO Q.A. DOCUMENTATION

***** ROUTING CONTINUED ON NEXT PAGE *****

PRODUCTION	APPROVAL	QUALITY ASSURANCE	PROCESS ENGR.	REVISION
MET. LAB.			PRODUCTION	MET. LAB.
				QUALITY ASSURANCE

ATTACHMENT #

INSPECTION REPORT AND RECORD OF CHANGE EVENTS

691 N 0046 | 150933 | | | 455 | 50941 |

JOB No. 1 R. S. No. 150933 RELEASE No. LINE SPLIT OP No. 455 PART No. 50941
Route Sheet Qty.: 1 Qty. Accepted: 1 Qty. Rejected: NCMR No.:

H't. No.: 7323-1 Mat'l.: ASME SA 351 ORCFBH B.J.P.O. No. & Vend./NA V-69827

Weldment No.: Component S/N: Welding Oper. Symb.:

Weld Filler Mat. No.:

Insp. (PT) No.: Insp. (UT) No.: Date 19

Insp. (RT) No.: Insp. () No.: Date 19

Acceptance By Cust: Paul Dando Balthasar Other Date 6/25 1976

Oper. No. Last Previous Inspection: 445 Insp. By: B.L. Co. J.

Component Route Sheet Record: (Cont.)

See Over Sheet 12 of 13 Inspectors: (81-27J) Date 6/24 1976

CG-86 12/71

INSPECTION REPORT AND RECORD OF CHANGE EVENTS

691 N 0046 | 150933 | | | 465 | 50941 |

JOB No. 1 R. S. No. 150933 RELEASE No. LINE SPLIT OP No. 465 PART No. 50941
Route Sheet Qty.: 1 Qty. Accepted: 1 Qty. Rejected: NCMR No.:

H't. No.: Mat'l.: ASME SA 351 ORCFBH B.J.P.O. No. & Vend./NA V-69827

Weldment No.: Component S/N: Welding Oper. Symb.:

Weld Filler Mat. No.:

Insp. (PT) No.: Insp. (UT) No.: Date 19

Insp. (RT) No.: Insp. () No.: Date 19

Acceptance By Cust: Other Date 19

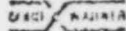
Oper. No. Last Previous Inspection: 455 Insp. By: B.L. Co. J.

Component Route Sheet Record: (Cont.)

See Over Sheet 1 of 1 Inspector: (81-27J) Date 6/29 1976

CG-86 12/71

ATTACHED



CUSTOMER BARGOCK & WELCOX
P.O. NO. 020003 124
PROJECT MIDLAND II

RC NO. 1509
ITEM NO. 1-1
DRG. NO. 509491
PART NO. PUMP CASE ASSEMBLY

BYRON JACKSON SER. NO.
691-N-0046

Byron Jackson Pump Division
BORG WARNER CORPORATION

Quality Control Department
Plr. 7 Sta. No. 11

NON DESTRUCTIVE INSPECTION REPORT

Customer Bergock & Welcox Customer Order No. _____
BJ Job No. 691-N-0046 Serial No. _____ R.C. No. 150933
Part Name Pump Case Assy Drawing No. 509491 Heat No. 7330

The Following Specified Inspections Have Been Accepted

Dye Penetrant | Hydrastatic | Pneumatic | Shock | _____
Ultrasonic | Magnaflox | Zyga | Hardness | _____

No. of Pieces 1 Operation No. 365 Specification No. IT 4140 RWH
Hardness Req. NA Actual NA N.C.M.R. No. 91431
Batch No. 71) & 732 Date 5-19-76

WELDING	CASTINGS	WROUGHT MAT'LS	FABRICATION
Root Pass <input type="checkbox"/>	Rough <input type="checkbox"/>	Rough <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>
Inter. Pass <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>	Finish <input type="checkbox"/>
Final <input type="checkbox"/>	Finish <input type="checkbox"/>	Finish <input type="checkbox"/>	
Overlay <input type="checkbox"/>			
TIME ON TEST	Total Hours <input type="text"/>	Minutes <input type="text"/>	

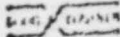
Test Performed and Reported By: Level II (E1-38J) Date 5-19 19 76
Test Witnessed and Approved By:
Byron Jackson: Level II (E1-38J) Date 5-19 19 76
Customer _____ Date _____ 19 ____
Other _____ Code: _____ Date _____ 19 ____

REMARKS

Liquid Penetrant Inspected all machined surfaces of case side and back of sections and discharge nozzle and welds #1, #2, and lifting lugs. Edge inspection also meets requirements of NCMR 91431. Inspection performed a lot of hydrastatic.

HOLD CODE INSPECTION
REL BY Ed. Cabell 5/19/76

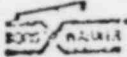
ATTACHMENT # 6



CUSTOMER BARCOCK & WILCOX
P.O. NO. 270011 14
PROJECT MIDLAND II

RC NO. 15093
ITEM NO. 1-1
DRG. NO. 509461
PART NO. PUMP CASE ASSEMBLY

BYRON JACKSON SER. NO. 691-N-0046



Byron Jackson Pump Division
EDGECORP CORPORATION

Quality Control Department
Plt. 3 Sta. No. 11

NON DESTRUCTIVE INSPECTION REPORT

Customer Barcock & Wilcox Customer Order No. _____
BJ Job No. 691-N-0046 Serial No. _____ R.C. No. 150933
Part Name Pump Case Assy Drawing No. 509461 Heat No. 7323 - 7330

The Following Specified Inspections Have Been Accepted

Dye Penetrant <input checked="" type="checkbox"/>	Hydrostatic <input type="checkbox"/>	Pneumatic <input type="checkbox"/>	Shack <input type="checkbox"/>	<input type="checkbox"/>
Ultrasonic <input type="checkbox"/>	Magnaflix <input type="checkbox"/>	Zygo <input type="checkbox"/>	Hardness <input type="checkbox"/>	<input type="checkbox"/>

No. of Pieces 1 Operation No. 365 Specification No. 17 4140 Rev H
Hardness Req. NA Actual NA N.C.M.R. No. 91431
Batch No. 712 X-732 Date 6-1-76

WELDING	CASTINGS	WROUGHT MAT'LS	FABRICATION
Root Pass <input type="checkbox"/>	Rough <input type="checkbox"/>	Rough <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>
Inter. Pass <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>	Finish <input type="checkbox"/>
Final <input type="checkbox"/>	Finish <input checked="" type="checkbox"/>	Finish <input type="checkbox"/>	
Overlay <input type="checkbox"/>			
TIME ON TEST	Total Hours <input type="text"/>	Minutes <input type="text"/>	

Test Performed and Reported By: [Signature] Date 6-1 1976
Test Witnessed and Approved By: _____ Date _____ 1976
Byron Jackson: [Signature] Date 6-1 1976
Customer: [Signature] Date _____ 19____
Other: [Signature] Date 6-1 1976

REMARKS

Liquid Penetrant Inspected all machined surfaces of
Case Sock and necks of Suction and Discharge
nozzle and weldment. The inspection also met
requirement of NCMR 91431

ATTACHMENT # 6

33X38 DFSS UNIT SIZE	N REF/CONF	LINKAGE	509461XX PART NO.	VPC SOURCE	80400 USAGE	WILCOX AND WILCOX CUSTOMER NAME	691N0048.00 JOB NUMBER	
75 CT. 08/04/75 HEAD REV.	CLASS # 1-P.B.P. GENERAL NOTE		PUMP CASE ASSY PART NAME		037 PAGE	01 LINE	000 SPLIT	START 150935 DOD
06/75 BODY ACT.	07/01/75 BODY REV.	Heat No.	0 QTY. BREAK	220727 PATTERNS/MACHINE FROM	NEXT ASSY.		FINISH PRODUCE MDAYS = 139 1 PIECES	
EO. CODE	C DRAW. REV.	ASME SA-351 GR CF8M RAW MATERIAL	0.000X 0.000X 0.000= ROUGH SIZE	PIECES	Desired statistical Length			

DESCRIPTION AND INSTRUCTIONS	MACHINE	QTY	UNIT PRICE	TOTAL PRICE	DATE	PIECES	EXT
305 INSPECT	5503 INSP				8/12/76		(81-54J)
310 ³ DISMANTLE HYDROTEST ASSY & DRAIN	2978 RU/HYDRO	.50	8.00		8/12/76	109	3672
320 ARC-AIR OFF CUPS (SUCTION/DISCH) AT CASE WELDS. 10-6-75	2691 WELD-AEC	1.00	12.00		7-8-75		12115
330 CHUCK WITH SUCT. NOZZLE UP & TRUE UP. FINISH MACHINE SUCT. NOZZLE & WELD PREP PER DET. X	3331 SCHEIS	4.00	14.00		12-10-75		11555
335 INSPECT	5503 INSP				8/9/76		(81-54J)
340 LOCATE ON COVER SIDE (SUCTION NOZZLE UP) & TRUE UP. FINISH MACHINE DISCHARGE NOZZLE & WELD PREP PER DETAIL Y	3031 MB-HDRZ	2.10	8.64		8-17-76		487
345 INSPECT	5503 INSP				8-31-76		(81-54J)
355 DEBURR AND BLEND ANY SUDDEN SHOULDERS - DO NOT GRIND WATERWAYS - SEE FOREMAN BEFORE PROCEEDING.	2396 CLN/BURR	.75	7.00		8-31-76		10200
360 STEAM CLEAN	5506 INSP				8-31-76		(81-54J)
665 LIQUID PENETRANT INSPECT ALL MACHINED SURFACES AND WELDMENTS PER IT-4140, REV H, CG-61 REQ'D. CUSTOMER WITNESS POINT-FINAL ACCEPTANCE INSPECTION	2997 NUC-CLN						
	5510 INSP				8-31-76		(81-54J)

*** OPERATION CONTINUED ON NEXT PAGE ***

Clear NCMR # 111839

APPROVAL	SEP 18 1975	REVISION
PRODUCTION	MET. LAB.	QUALITY ASSURANCE
QUALITY ASSURANCE	PROCESS ENGR.	PRODUCTION
MET. LAB.	QUALITY ASSURANCE	PRODUCTION

80000 PROD	33X33X38 DFSS UNIT SIZE	N REF/CONF	LINKAGE	509461XX PART NO	VPC SOURCE	80400 USAGE	DARTMOUTH MILCOX CUSTOMER NAME	69140048 JOB NUMBER	
08/06/75 HEAD ACT.	08/04/75 HEAD REV.	CLASS # 1-P.B.P. GENERAL NOTE		PUMP CASE ASSY PART NAME		037 PAGE	01 LINE	000 SPLIT	START 150935 000
08/06/75 BODY ACT.	07/01/75 BODY REV.	Heat c/o	0 QTY. BREAK	220727 PATTERNS/MACHINE FROM	NEXT ASSY.		FINISH		PRODUCE M DAYS = 13 1 PIECES
ED CODE	C DRAW REV	A S M E SA-351 GR CF8M RAW MATERIAL		0.000X 0.000X 0.000= ROUGH SIZE	PIECES		PIECES		

QTY	DESCRIPTION	DATE	BY	REVISION	DATE	PIECES	REVISION	DATE	PIECES
31.5	CUSTOMER SIGN CODE HOLD POINT CODE INSP. SIGN STEAM CLEAN	8/31/76	Clearance R	70926					
375	RADIOGRAPHICALLY INSPECT SUCTION & DISCHARGE NOZZLE WELD PREPS PER IT-3661, REV F. R.S. SKETCH IT-4297, REV A. CUSTOMER WITNESS POINT CUSTOMER SIGN CODE HOLD POINT CODE INSP. SIGN	9/3/76	D.L. Liliqun (Booth 10)						
385	INSPECT - RECORD AS BUILT DIM'S (ACTUAL) PER DWG NO. 28-13024 - TO BE RETAINED IN MASTER R/S FILE IN O.A. DOCUMENTATION. CUSTOMER WITNESS POINT CUSTOMER SIGN DATE	9-7-76	George R. Brown B/W	DO CP 165	9/29/76				
35	STEAM CLEAN & DETERGENT WASH, GRADE III WATER RINSE. USE NYLON OR STAINLESS STEEL BRUSHES NOT PREVIOUSLY USED ON NON-STAINLESS MAT'L PER IT-3758 REV II, ADD 3	9/14/76	B/W						
400	WASH INT & EXT SURFACES AS FOLLOWS (ROOM TEMP)								

*** OPERATION CONTINUED ON NEXT PAGE ***

PRODUCTION		APPROVAL		REVISION	
MET. LAB.	SEP 18 1976	QUALITY ASSURANCE	PROCESS ENGR.	PRODUCTION	MET. LAB.
QUALITY ASSURANCE		QUALITY ASSURANCE		QUALITY ASSURANCE	

ATTACHMENT # 6
RECENT

UNIT SIZE	N	REF/CONF	LINKAGE	509461XX	VPC	80400	CUSTOMER NAME	691N0048.00
HEAD REV	08/04/75	CLASS # 1-P.B.P.	GENERAL NOTE	PUMP CASE ASSY	037	01	000	150935
BODY REV	07/01/75	Heat No.	QTY. BREAK	220727	PAGE	LINE	SPLIT	150935
DRAW REV	C	ASME SA-351 GR CF8M	ROUGH SIZE	0.000X 0.000X 0.000=	NEXT ASSY.			PRODUCE M-DAYS = 139
					Drawn Material Length			PIECES

						Date	Draw	Enpl
435	INSPECT - LIQ. PENT. INSP. WELDS PER IT-4140, REV H: CG-61 REQ'D	5510	INSP			9-30-76	①	
44	RE-STAMP R.T. MARKERS ON CASE -- USE LOW STRESS PROOF STAMPS. B.J. X-RAY SUPERVISOR TO DRAW R.S.S. RECORDS FROM Q.A. AND DIRECT STAMPING.	5502	INSP					
445	INSPECT - SUPERVISOR VERIFICATION OF STAMPING REQUIRED - SUPER. SIGN <i>[Signature]</i> DATE 9/10/76	5509	INSP	①		9/30/76	①	(1-50)
450	CLEAN ALL CONTAMINATED SURFACES WITH NEW ACETONE AND WIPE WITH LINT FREE CHEESE CLOTH.	2227 2005	ASSY-NUC	.50	2.00	9-7-76	①	1855
455	INSPECT - CHECK IDENTIFICATION & CLEANLINESS CUSTOMER WITNESS POINT CUSTOMER SIGN <i>[Signature]</i> DATE 10/1/76	5503	INSP			10-1-76	①	(1-50)
460	PACKAGE FOR SHIPMENT PFR IT-4081, REV B. NOTE DO NOT SEAL CRATE UNTIL AFTER WITNESS. CUSTOMER WITNESS POINT (PACKAGING) CUSTOMER SIGN <i>[Signature]</i> DATE 10-7-76	9895	PNT BTH			10-7-76	①	(1-56)
465	INSPECT - HOLD POINT FOR FINAL RELEASE CUSTOMER RELEASE OF DOCUMENTATION REQUIRED CUSTOMER SIGN <i>[Signature]</i> DATE TWX FROM SHIPLOT DATED 10/20/76 CODE RELEASE OF DOCUMENTATION REQUIRED. CODE INSP. SIGN <i>[Signature]</i> DATE 10-4-76 RETURN COMPLETED ROUTING TO Q.A. DOCUMENTATION	5508	INSP			10/2/76	①	(1-56)

***** ROUTING CONTINUED ON NEXT PAGE *****

APPROVAL	5510	REVISION	
PRODUCTION	MET. LAB.	QUALITY ASSURANCE	PROCESS ENGR.
PRODUCTION	MET. LAB.	QUALITY ASSURANCE	

ATTACHMENT A 6

INSPECTION REPORT AND RECORD OF QUALITY CONTROL

691-N-0048 | 150935 | 037 | 01 | 000 | 4557 | 509461 XX

JOB No. R. S. No. RELEASE No. LINE SPLIT OP No. PART No.
Route Sheet Qty.: 1 Qty. Accepted: 1 Qty. Rejected: NCMR No.:

H.T. No.: 7366/7367 Mat'l.: ASME SA-351 GR CF8M B.J.P.O. No. & Vend./NA V-69827

Weldment No.: Component S/N: Welding Oper. Symb.:

Weld Filler Mat. No.:

Insp. (PT) No.: Insp. (UT) No.: Date 19

Insp. (RT) No.: Insp. () No.: Date 19

Acceptance By Cust: *George P. Brown 10/1/76 B/W* Date 19

Oper. No. Last Previous Inspection: #445 Insp. By: (B1-54J)

Component Route Sheet Record: (Con

See Over Sheet of Inspectors: (B1-54J) Date 10-1 19
CG-86 12/71

INSPECTION REPORT AND RECORD OF QUALITY CONTROL

691-N-0048 | 150935 | | | | 4651509461 XX

JOB No. R. S. No. RELEASE No. LINE SPLIT OP No. PART No.
Route Sheet Qty.: 1 Qty. Accepted: 1 Qty. Rejected: NCMR No.:

H.T. No.: 7366/7367 Mat'l.: ASME SA-351 GR CF8M B.J.P.O. No. & Vend./NA V-69827

Weldment No.: Component S/N: Welding Oper. Symb.:

Weld Filler Mat. No.:

Insp. (PT) No.: Insp. (UT) No.: Date 19

Insp. (RT) No.: Insp. () No.: Date 19

Acceptance By Cust: *D. J. ... 10/1/76 PACKAGING ONLY* Other: *[Signature]* Date 10-4 19

Oper. No. Last Previous Inspection: 455 Insp. By: B154J

Component Route Sheet Record: (Cor

See Over Sheet 12 of 13 Inspectors: (B1-65J) Date 10/4 19
CG-86 12/71

ATTACH SIGNATURE

NON DESTRUCTIVE INSPECTION REPORT

Customer (P) abecker & wilson Customer Order No. _____
 BJ Order No. or S/N 691-N-0048 R.C. No. 15-0935
 Part Name Pump Case Assy. Drawing No. 509461 Heat No. 7366-7367

The Following Specified Inspections Have Been Accepted

Dye Penetrant <input checked="" type="checkbox"/>	Hydrostatic <input type="checkbox"/>	Pneumatic <input type="checkbox"/>	Shock <input type="checkbox"/>	<input type="checkbox"/>
Ultrasonic <input type="checkbox"/>	Magnaflux <input type="checkbox"/>	Zygo <input type="checkbox"/>	Hardness <input type="checkbox"/>	<input type="checkbox"/>

No. of Pieces 1 Operation No. 365 Specification No. IT 4140 Rev H
 Hardness Req. _____ Actual Batch 797 & 800

ATTACHMENT #6

WELDING	CASTINGS	WROUGHT MAT'LS	FABRICATION
Root Pass <input type="checkbox"/>	Rough <input type="checkbox"/>	Rough <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>
Inter. Pass <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>	Finish <input type="checkbox"/>
Final <input type="checkbox"/>	Finish <input type="checkbox"/>	Finish <input type="checkbox"/>	
Overlay <input type="checkbox"/>			
TIME ON TEST	Total Hours <input type="text"/>	Minutes <input type="text"/>	

Test Performed and Reported By: Leif H. (61-33) Date 8-31 1976

Test Witnessed and Approved By:

Byron Jackson: Leif H. (61-33) Date 8-31 1976

Customer _____ Date _____ 19____

Other _____ Code: [Signature] Date 8/31 1976

REMARKS

Liquid Penetrant Inspected all machined surfaces and weldments. This inspection also meets requirements of NDEMR'S - 111839 and 80926. 122501

NON DESTRUCTIVE INSPECTION REPORT

Customer BARCOCK & WILCOX Customer Order No. _____

BJ Job No. 691-N-0048 Serial No. _____ R.C. No. 150935

Part Name RIMP CASE ASST Drawing No. 509461 XX Heat No. 7366/1367

The Following Specified Inspections Have Been Accepted

Dye Penetrant <input checked="" type="checkbox"/>	Hydrostatic <input type="checkbox"/>	Pneumatic <input type="checkbox"/>	Shock <input type="checkbox"/>	<input type="checkbox"/>
Ultrasonic <input type="checkbox"/>	Magnaflux <input type="checkbox"/>	Zygo <input type="checkbox"/>	Hardness <input type="checkbox"/>	<input type="checkbox"/>

No. of Pieces 2E Operation No. 365 Specification No. IT-4140 PEN.H

Hardness Req. _____ Actual _____ N.C.M.R. No. _____

Batch No. 7979 800 Date _____

ATTACHMENT # 6

WELDING	CASTINGS	WROUGHT MAT'LS	FABRICATION
Root Pass <input type="checkbox"/>	Rough <input type="checkbox"/>	Rough <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>
Inter. Pass <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>	Semi-Finish <input type="checkbox"/>	Finish <input type="checkbox"/>
Final <input type="checkbox"/>	Finish <input checked="" type="checkbox"/>	Finish <input type="checkbox"/>	
Overlay <input type="checkbox"/>			
TIME ON TEST		Total Hours <input type="text"/>	Minutes <input type="text"/>

Test Performed and Reported By: LEVEL II (initials) Date 9-3 1976

Test Witnessed and Approved By:

Byron Jackson: LEVEL II (initials) Date 9-3 1976

Customer: Barcock & Wilcox Date 9/3/76 1976

Other: D.L. (initials) Code: _____ Date _____ 1976
(36476)

REMARKS

LIQUID PENETRANT INSPECTED
ALL MACHINED SURFACES AND
WELDMENTS THIS INSPECTION ALSO
MEETS REQUIREMENTS OF NMR'S
122801, 90926 & 111839

X



NONCONFORMANCE REPORT

6. PROJECT NAME: Midland		7. NONCONFORMING PART NO: RS-150071 Liner RS-150086 Flange		8. NONCONFORMING PART NAME: Heat Exchanger 1P51-B		1. NCR SERIAL NO: N-03-4-0-037	
9. SERIAL NUMBER: 1P51-B		10. ORG. COMMITTING NG: B&W Lynchburg		11. AREA/LOC. OF NG: B&W Clean Room on Missile Shield Unit 1		2. DATE: 5-12-80	
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: Primary Coolant Pump Heat Exchanger 1P51-B has several nicks and gouges on the inner liner wall. Some of the gouges may be deep enough to violate minimum wall thickness. Also, 11 of the nut bearing surfaces on the Heat Exchange Flange are scored and may affect load distribution on the nut. The above places Heat Exchanger 1P51-B in an indeterminate condition. CPCo requests an Engineering evaluation be made to determine the serviceability of the Heat Exchanger.						3. DATE OF REV: Closed 7-14-80	
						4. FILE NO: 16.4.1	
13. QA RECOMMENDATION FOR PART CA: Verify minimum requirements for pump serviceability relative to specific items in Block 12.						5. DISTRIBUTION ACTION COPY: CEMahaney B&W - Lynchburg, VA INFO COPY: WRBird DATaggart RBCherba JLWood TCCooke(2) JWCook JLCorley LADreisbach HGuetling GSKeeley BWMarguglio JMilandin DBMiller RWShope	
DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input checked="" type="checkbox"/> NOT REQUIRED <input type="checkbox"/>							
14. HOLD TAGS APPLIED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		HOLDER, LOCATION & TYPE OF HOLD TAGS APPLIED: 037 Flange of Heat Exchanger (1 tag)					
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:							
16. DOES NC AFFECT Q-LIST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>				17. IS NC REPORTABLE PER 50.15(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>			
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>				19. IF YES, DATE & TIME OF REPORT TO NRC: NA			
20. IF YES, WHO MADE REPORT TO NRC: NA				21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA			
22. NCR ORIGINATED BY: <i>Harold L. Allen</i>				23. WRITTEN REPLY REQUIRED BY: 5-30-80 TO ESTABLISH CA COMPLETION DATE		24. REPORTER'S SIGNATURE/DATE: <i>H.L. Allen</i> 5-12-80	
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE: B&W SPR 121 Rev 0, BJ Letter Engineering Evaluation from John Calcagno dated 5/27/80 to B&W Lynchburg J T Walton acceptable (use as is). B&W Lynchburg letter of endorsement 12B/T1.2/12E4 from A H Lazar to D B Miller CPCo dated 7/10/80.							
26. DESIGN/PROJECT SIG. AUTH. DISP.: NA		27. FMO SIG. AUTH. DISP.: NA		28. PROCUREMENT SIG. CONC. DISP.: NA		29. SIG. OF ORG. RESP. FOR C/A: BJ Letter Evaluation 5/27/ B&W Letter 12B/T1.2/12E4	
30. FAB/CONST. SIG. AUTH. IMP. DISP.: BJ Letter Evaluation 5/27/80 B&W Letter 12B/T1.2/12E4		31. SIG. OF TEST GROUP ACKNOW. TION: NA		32. FOR MAJOR MOD - PLT. SUPT. SIG. AUTH. DISP.: NA		33. QA AUTH. SIG. TO IMPLEMENT DISP.: <i>Harold L. Allen</i>	
34. METHOD OF PART CA VERIFICATION: Review of SPR 121 Rev 0, BJ Letter Engineering Evaluation dated 5/27/80 and B&W Lynchburg letter 12B/T1.2/12E4 dated 7/10/80.							
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: B&W Lynchburg Letter 12B/T1.2/12E4 dated 7/10/80				36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: <i>Harold L. Allen</i> 7/15/80		37. NCR CLOSED BY/DATE: (PART & PROCESS CA COMPLETE) <i>Harold L. Allen</i> 7/15/80	



Consumers
Power
Company

NONCONFORMANCE REPORT

PROCESS CORRECTIVE ACTION

PRODUCTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-03-4-0-03

PAGE 2 OF 2

38. QA ASSESSMENT OF ROOT CAUSE(S):

Unknown, to be determined.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Same as above.

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER _____

41. QA RECOMMENDATION FOR PROCESS CA:

Unknown, to be determined.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

See BJ Engineering Evaluation from John Calcagno dated 5/27/80 to B&W Lynchburg
J T Walton.

43. METHOD OF PROCESS CA VERIFICATION:

Review BJ Engineering evaluation from John Calcagno dated 5/27/80 to B&W Lynchburg
J T Walton and B&W Lynchburg letter 12B/T1.2/12E4 from A H Lazar to D B Miller CPCo.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

B&W Lynchburg letter 12B/T1.2/12E4

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

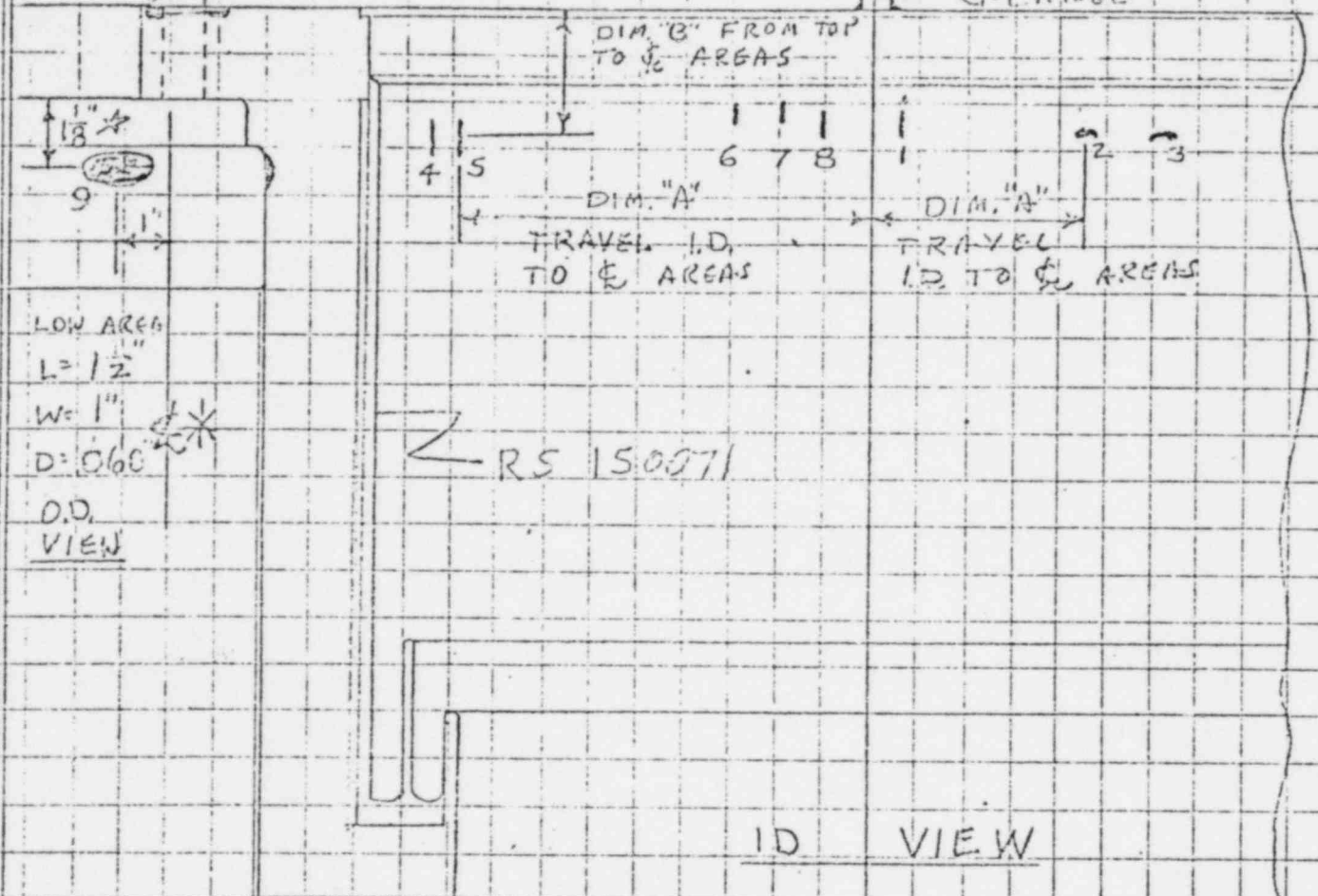
Harold L. Allen 7/15/80

03-4-0-017
TION-

1P51B

Nut bearing surface Scored - .005 to .015" Deep
R.S 150086

THREADED CONNECTION ON TOP FLANGE



LOW AREA
L = 1/2"
W = 1"
D = 0.060
O.D.
VIEW

R.S 150071

ID VIEW

	LENGTH	WIDTH	DEPTH	DIM. "A"	DIM. "B"		
1	1/4"	1/8"	.005"	1/2"	5 3/8"	I.D.	NOTE: ALL
2	1/4"	1/8"	.007"	12 1/4"	5 1/4"	I.D.	RAISED METHOD
3	1/2"	1/16"	.005"	16 1/2"	5 1/4"	I.D.	HAS BEEN
4	5/8"	1/16"	.005"	23 3/4"	5 7/8"	I.D.	REMOVED
5	1/2"	1/16"	.005"	22 1/2"	5 7/8"	I.D.	
6	3/4"	1/16"	.009"	5 1/2"	6"	I.D.	
7	2 3/4"	1/16"	.008"	3 1/2"	5 1/4"	I.D.	
8	2 1/2"	1/16"	.006"	1 3/4"	6 1/4"	I.D.	
9	1 1/2"	1"	.060"	1"	2"	OD	

4, 3, 1
R.S 150086
5-13

BABCOCK & WILCOX

DEPARTMENT C P Co Consultant

DATE 5/13/80

BY Allen

REVISION

NOTE: The above dimensions were taken after the heat exchanger had been prepared for installation, some

CHECKED DATE

BY

BABCOCK & WILCOX
SITE PROBLEM REPORT

PDS-21091-7 (3-80)

TITLE (MAX. 30 CHARACTERS) HEAT EXCHANGER		PRIORITY 1 <input type="checkbox"/> 2 <input checked="" type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> NONE <input type="checkbox"/>	
CUSTOMER CONSUMERS POWER		LEAD MANAGER K.K. KENNEDY	
SUPPLIER		DOC. ID 13	NSS NO. 13
		SPR NO. 121	REV. NO. 0
PA NO.	CHARGE NO.	MHR. BUDGET	VENDOR CLAIM NO. / SHIPPING DAMAGE NO.
			PART NO. / TGS NO. 620-0013-42 40-006
DESCRIPTION OF PROBLEM			

SEE ITEM 12 ON THE ATTACHED NCR.

ORIGINATOR CONSUMERS NCR # H-03-4-0-037	DATE 5/13/80
H.A. GUETLING	

STATUS ACTION TO DATE, INCLUDING PERSONS CONTACTED:
L.D. CLINE - NPGD, LYNCHBURG

FURTHER ACTION RECOMMENDED BY SITE PERSONNEL: **URGENT!!**
VENDOR TO PROVIDE RESOLUTION.

RESOLUTION

- Nicks and gouges on the heat exchanger have been evaluated (by examination of the heat exchanger stress analysis) from the NCR sketch and found to be acceptable as is, both inside and out.
(Ref: Letter to J.T. Walton from J. Calcagno, dated 27 May 1980)
- Secured areas at bolt locations - inspected 29 May 1980 by Byron-Jackson as is as agreed during meeting of 5-19-80

<input type="checkbox"/> INFORMATION ONLY		RESOLUTION PREPARED BY [Signature]	DATE 6/10/80
POTENTIAL CROSS-CONTRACT APPLICABILITY <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	POTENTIAL SAFETY CONCERN <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	RESOLUTION DOCUMENT NO.	REVIEWED BY [Signature]
		APPROVED BY [Signature]	DATE 6-10-80

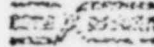
SPR CLOSEOUT REPORT:	CLOSED OUT BY [Signature]	DATE
----------------------	-------------------------------------	------

H. A. Guetling

~~SECRET~~
E. MARTINEZ

Byron Jackson Pump Division

P.O. BOX 2017 TERMINAL ANNEX, LOS ANGELES, CALIFORNIA 90021 • 213/207-5171



ASC

27 May 1980

TELECOPY

Babcock & Wilcox
Power Generation Group
P. O. Box 1260
Lynchburg, Virginia 24505

Attention: Mr. J. T. Walton

Subject: Midland RCP
Outstanding SPR's

SPR 13-13-120-1 - Answered via letter Calcagno to Walton 20 May 80,
copy attached for easy reference.

SPR 13-13-124-0 - Impeller shaft grooves described were part of a
documented rework, during the manufacturing cycle,
to correct an undersize condition on the shaft.

The "weld build up" on the hydrostatic bearing in
the remains after removing a ring from that area
of the bearing. This is a non-functional surface
and the condition is not detrimental. For
strictly cosmetic purposes it could be blended
more smoothly, but such is not required.

~~SPR 13-13-121-0~~ - The "ticks and gouges" on the heat exchanger have
been evaluated (by examination of the heat
exchanger analysis) from your sketch and found to
be acceptable as is, both inside and out.

More detail is required describing the nut bearing
surfaces.

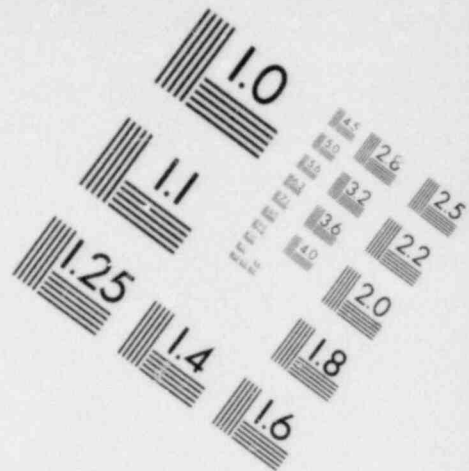
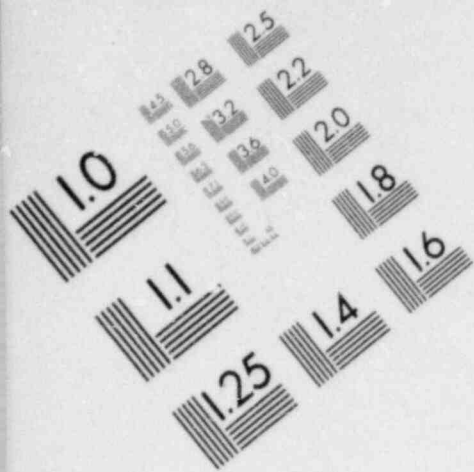
SPR 13-13-125-0 - Being reviewed by QC at this time. Will advise
ASAP.

John Calcagno

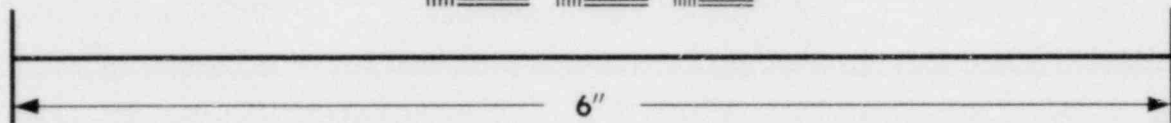
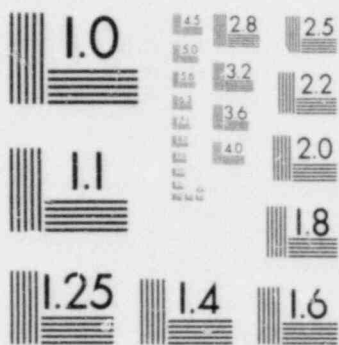
JG/ak

MAY 20 '80 AM

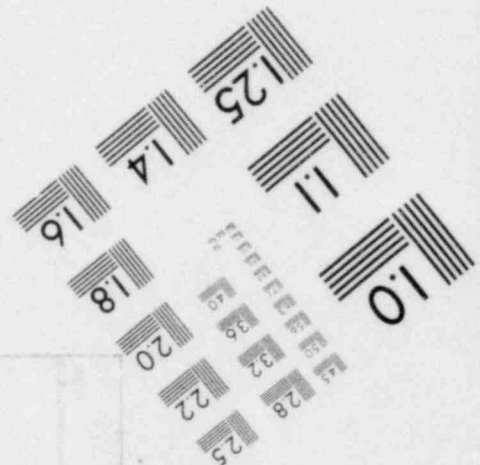
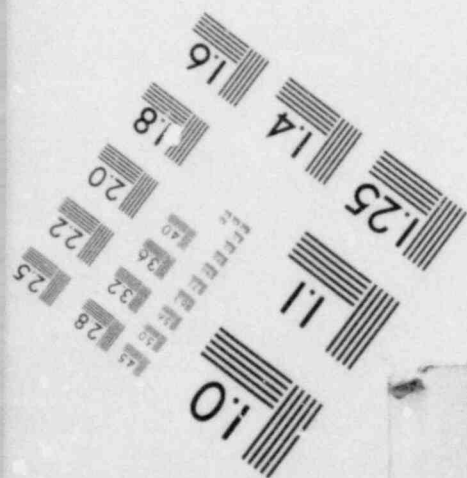
John Calcagno

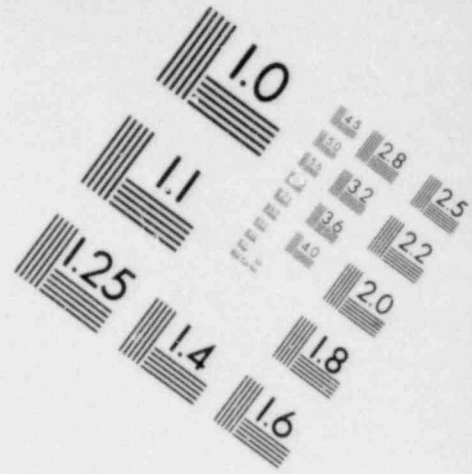
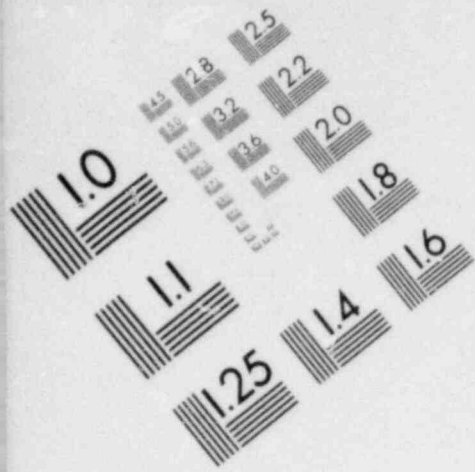


**IMAGE EVALUATION
TEST TARGET (MT-3)**

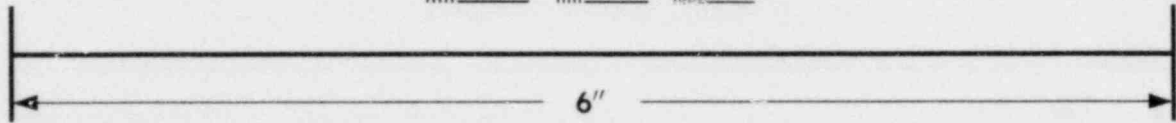
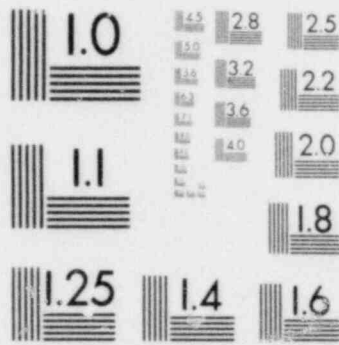


MICROCOPY RESOLUTION TEST CHART

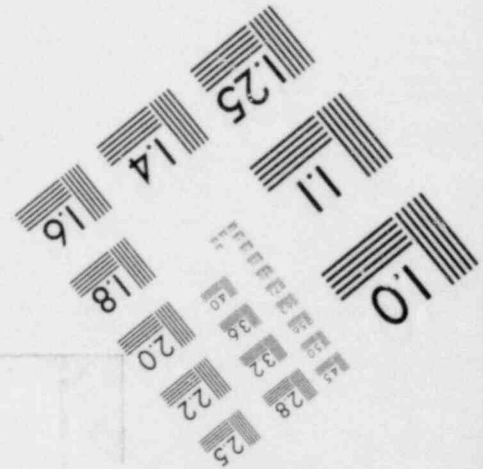
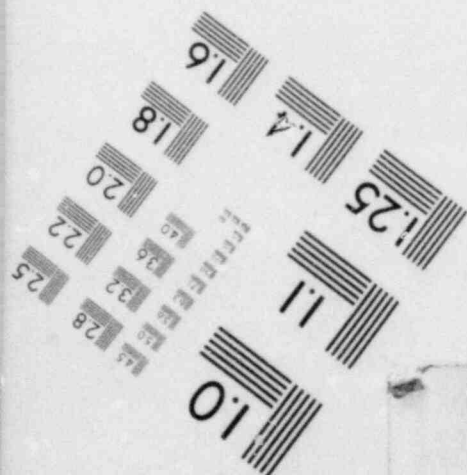




**IMAGE EVALUATION
TEST TARGET (MT-3)**



MICROCOPY RESOLUTION TEST CHART



Babcock & Wilcox

Power Generation Group

P.O. Box 1260, Lynchburg, Va. 24505

Telephone: (804) 384-5111

July 10, 1980

CPCO-2897

File: 12B/T1.2/12E4

Consumers Power Company
Post Office Box 1963
Midland, MI 48640

Attention: Mr. D. B. Miller
Site Manager

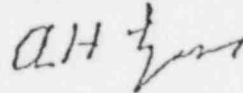
Subject: Consumers Power Company
Midland Plant, Units 1 and 2
REACTOR COOLANT PUMP

Dear Mr. Miller:

In the Site Coordination Meeting on July 9, 1980, your Quality Assurance Department stated that the only open item remaining on this program is the lack of a signature on a letter from J. Calcagno to B&W, dated May 27, 1980. (Attached)

This is to confirm a statement made by me in the July 9, 1980 meeting that B&W has reviewed the contents of J. Calcagno's letter of May 27, 1980 and concurs and endorses the statement made therein with respect to the subject Reactor Coolant Pump.

Yours very truly,



A. H. Lazar
Senior Project Manager

AHL:dcw
Attachment



NONCONFORMANCE REPORT

6. PROJECT NAME: <p style="text-align: center;">Midland</p>	7. NONCONFORMING PART NO: Reactor Anchor Bolt #19, Unit 1	8. NONCONFORMING PART NAME: Anchor Bolt #19	1. NCR SERIAL NO: M-03-4-0-044 2. DATE: 6-5-80
9. SERIAL NUMBER: <p style="text-align: center;">NA</p>	10. ORG. COMPLETING NC: B&W Construction	11. AREA/LOC. OF NC: Unit 1 Reactor	3. DATE OF REV: Closed 7-28-80 4. FILE NO: 16.4.4
12. "AS IS" NONCONFORMING CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFS: Field Construction Procedure (FCP-157 Rev 8, Seq 080 B.1.) states in part, " <u>DO NOT</u> exceed 13,700 psi hydraulic pressure". Contrary to the above, stud #19 on the outside diameter was tensioned to 14,000 psi, thereby violating the approved maximum permissible pressure of 13,700 psi as stated in the procedural requirements.			5. DISTRIBUTION ACTION COPY: RWShope INFO COPY: WJLee JWLillywhite WRBird BWMarguglio RECherba DBMiller JWCook JARutgers TCCooke(2) DATaggart JLCorley CDThompson LEDavis AWDePatie PKHansen SHHowell GSKeeley
13. CA RECOMMENDATION FOR PART CA: 1. Insure approved procedural requirements are enforced. 2. Insure Quality Control personnel are aware of the contents and requirements of the procedure. 3. Insure craft supervision are made aware of their responsibilities DESIGN/PROJECT ENG. DISPOSITION REQUIRED <input checked="" type="checkbox"/> NOT REQUIRED <input type="checkbox"/> in adhering to procedural requirements.			
14. HOLD TAGS APPLIED: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/> NUMBER, LOCATION & TYPE OF HOLD TAGS APPLIED: NA			
15. IS PROCESS CA REQUIRED: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> IF NO, ENTER JUSTIFICATION BELOW:			
16. DOES NC AFFECT Q-1ST ITEM: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		17. IS NC REPORTABLE PER 50.55(e): YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>	
18. IS NC REPORTABLE PER PART 21: YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		19. IF YES, DATE & TIME OF REPORT TO NRC: NA	
20. IF YES, WHO MADE REPORT TO NRC: NA		21. IF YES, NAME OF NRC OFFICIAL TO WHOM REPORTED: NA	
22. NCR ORIGINATED BY: <i>Harold L. Allen</i>		23. WRITTEN REPLY REQUIRED BY: 6-20-80 TO ESTABLISH CA COMPLETION DATE	24. SUPERVISOR'S SIGNATURE/DATE: <i>RG Wolney 6/5/80</i>
25. PART CA DISPOSITION, JUSTIFICATION & COMPLETION DATE: B&W letter M-1A-(P)-616 dated 6-11-80, Attendance Roster for corrective action B&W supervision dated 7-15-80, reviewed Attendance Rosters for craft instruction dated 7-21-80.			
26. DESIGN/PROJECT SIG. AUTH. DISP.: <p style="text-align: center;">NA</p>	27. ENO SIG. AUTH. DISP.: <p style="text-align: center;">NA</p>	28. PROCUREMENT SIG. CONC. DISP.: <p style="text-align: center;">NA</p>	29. SIG. OF ORG. RESP. FOR C/A: B&W Letter M-1A-(P)-616 (6-11-80)
30. FAB/CONST. SIG. AUTH. IMP. DISP.: B&W Letter M-1A-(P)-616 (6-11-80)	31. SIG. OF TEST GROUP ACKNOW. CONDITION: <p style="text-align: center;">NA</p>	32. FOR MAJOR MOD - FLT. SUPT. SIG. AUTH. DISP.: <p style="text-align: center;">NA</p>	33. QA AUTH. SIG. TO IMPLEMENT DISP.: <i>Harold L. Allen</i>
34. METHOD OF PART CA VERIFICATION: Reviewed documentation, B&W letter M-1A-(P)-616 dated 6-11-80, Attendance Roster for corrective action briefing B&W supervision dated 7-15-80, reviewed Attendance Rosters of craft instruction dated 7-21-80.			
35. SIG. OF ORG. RESP. FOR PART C/A SIGNIFYING COMPLETION: B&W Letter M-1A-(P)-616 (6-11-80)	36. SIG. VERIFYING PART C/A & HOLD TAG REMOVAL/DATE: <i>Harold L. Allen 7/25/80</i>	37. NCR CLOSED BY/DATE: (PART & THROUGH CA COMPLETS) <i>Harold L. Allen 7/28/80</i>	



Consumers
Power
Company

NONCONFORMANCE REPORT

PROCESS CORRECTIVE ACTION

PROJECTS, ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

NCR SERIAL NUMBER: M-03-4-

PAGE 2 OF 2

38. QA ASSESSMENT OF ROOT CAUSE(S):

QC Inspector not aware the detensioning procedure had been changed from 14,200 psi to 13,700 psi.

39. ACTUAL ROOT CAUSE(S), IF DIFFERENT FROM ABOVE (TO BE COMPLETED BY ORG. RESPONSIBLE FOR PROCESS CA):

Same as above.

40. PROCESS CA REQUIRED FROM:

DESIGN

FABRICATION

CONSTRUCTION

PROCUREMENT

INSPECTION

OTHER

41. QA RECOMMENDATION FOR PROCESS CA:

1. Instruct craft superintendents they are not to exceed the maximum limits established by approved procedure.
2. Instruct QC Inspectors to enforce the current approved procedure requirements that are in effect.
3. Implement document changes as required that will preclude future procedure violation.

42. PROCESS CA TO BE TAKEN BY ORG(S) CHECKED IN BLOCK 41 & DATE OF COMPLETION:

Process corrective action has been completed, see B&W letter M-1A-(P)-616, training session for supervision and crafts.

43. METHOD OF PROCESS CA VERIFICATION:

Reviewed documentation B&W letter M-1A-(P)-616 and briefing/training session for supervision and craft personnel.

44. SIG. OF ORG. RESPONSIBLE FOR PROCESS CA SIGNIFYING COMPLETION:

B&W Letter M-1A-(P)-516, 6-11-80

45. PROCESS CA COMPLETION VERIFIED BY/DATE:

Harold L. Allen 7/25/80

2 of 2
M-03-4-0
ACTION
NT

[Handwritten initials]

Babcock & Wilcox

B&W Construction Company

June 11, 1980

Copley, Ohio 44321

Telephone: (216) 666-8841

Bechtel Power Corporation
P. O. Box 2167
Midland, MI 48640

Attention: L. E. Davis

SUBJECT: Subcontract 7220-M-1A
NSSS Erection
SERIAL: M-1A-(P)-616

Dear Mr. Davis:

Following is our response to CPCo NCR #M-03-4-0-044 and letter #146FQA80, please transmit to CPCo Quality Assurance.

A meeting will be held with B&WCC Supervision and Q.C. personnel to discuss CPCo Nonconformance Reports M-03-4-0-004 and M-03-4-0-044 (both of which deals with failure to follow Field Construction Procedures).

Items to be discussed during this meeting shall include the following:

1. Requirements of B&WCC Quality Assurance Policy 9-QA-05 and Quality Control Procedure 9-QPP-102 to have and follow Field Construction Procedures.
2. To continually review procedures during work activities in order to be aware of changes as they occur.
3. Instruct Quality Control personnel to enforce the procedure requirements.

In addition, we shall also use the above requirements as a topic for a Safety/Q.C. Indoctrination meeting which is presented to the craft personnel.

If you have any questions concerning the above, please contact me.

Very truly yours,

[Handwritten signature: R. W. Shope]

R. W. Shope

RWS/jlj

cc: W. J. Lee
V. N. Asgaonkar
C. D. Thompson
J. L. Corley - CPCo
File



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Power
Company

PROJECTS, ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS NEEDED" CONDITION WITH REFERENCES:

The filler material color coding requirements stated in WFMC-1, Rev 6 and FIW-1.120, Rev 1 do not agree. Examples:

Table 1 WFMC-1

E-308L-16 (yellow)
E-309-16 (black)
Drop Weight Tested
E-7018 (white)

Table 1 FIW-1.120

E-308L-16 (blue)
E-309-16 (blue)
All carbon or alloy steels (red)

AFR GEN NO:

M-01-09-0-01

PRC/DEPT AUDITED:

Bechtel Construction

DATE OF CHECK:

7-1-80

FILE NUMBER:

18.4.3.4

DISTRIBUTION:

WRBird	DATaggart
KLBishop	JLZimmerman
JWCook	File
TCCooke	RBCherba
JLCorley	PKHansen
LEDavis	EDNewman
LADreisbach	RLRixford
SHHowell	RASimanek
GSKeeley	
BWMarguglio	
JMilandin	
DBMiller	
KORafferty	
JARutgers	

RECOMMENDED CORRECTIVE ACTION:

1. Determine what color code is to be used.
2. Revise the affected document(s) to reflect the color code arrived at in Item 1.

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment will be provided 14 days after receipt of Audit Report.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A:

Bechtel

PERSON MAKING C/A COMMITMENT:

KLBishop

METHOD OF VERIFICATION:

IS AF REPORTABLE PER 50.55(e):

YES NO

IF "YES", DATE OF REPORT TO NRC:

NA

IF "YES", TIME OF REPORT TO NRC:

NA

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED:

NA

IF "YES", WHO MADE REPORT:

NA

AFR ORIGINATOR'S SIGNATURE:

K. D. Rafferty

SUPERVISOR'S SIGNATURE:

J. Bishop 7/21/80

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:



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Power
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PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS HEADED" CONDITION WITH REFERENCES:

Paragraph 2.4.1 of WFMP-1, Rev 3 requires the marking of electrode shall include: the heat and/or lot number, as applicable, or a control marking code (control designation) that identifies the materials with the manufacturer's certified materials test report, manufacturer's trade name, specification, grade and classification as applicable.

Contrary to the above, QC vault records AEO #612, PO #F3037 do not agree with actual electrode checked in field. QC records indicate Lot #2047367, Heat #546156, however, the actual cans in the field are marked Lot #2247894, Heat #546156. This discrepancy is one from six records reviewed.

AFR SER NO:
M-01-09-0-02

PROJ/DEPT AUDITED:
Bechtel Construction

DATE OF ORIGINATION:
7-1-80

FILE NUMBER:
18.4.3.4

DISTRIBUTION:

WRBird	DATaggart
KL Bishop	JLZimmerman
JWCook	File
TCCooke	RBCherba
JLCorley	PKHansen
LEDavis	EDNewman
LADreisbach	RLRixford
SHHowell	RASimanek
GSKeeley	
BWMarguglio	
JMilandin	
DBMiller	
KORafferty	
JARutgers	

RECOMMENDED CORRECTIVE ACTION:

1. Withdraw all specific 1/8"-E308L-16 electrode of this heat number and lot number from storage and issue area until required and correct documentation can be obtained.
2. Provide assurance that all welding rod of this heat number and lot number is acceptable per ASME requirements.
3. If documentation is unavailable, further corrective action will be determined at that time.

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment will be provided 14 days after receipt of Audit Report.

DATE OF C/A COMPLETION:

ORG. RESP FOR C/A:

PERSON MAKING C/A COMMITMENT:

DATE OF C/A EFFECTIVENESS:

Bechtel QC Receiving

DADelaney

METHOD OF VERIFICATION:

IS AF REPORTABLE PER 90.55(e):

YES NO

IF "YES", DATE OF REPORT TO NRC:

NA

IF "YES", TIME OF REPORT TO NRC:

NA

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED:

IF "YES", WHO MADE REPORT:

NA

NA

AFR ORIGINATOR'S SIGNATURE:

[Signature]

SUPERVISOR'S SIGNATURE:

[Signature] 7/21/80

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:



AUDIT FINDING REPORT

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS NEEDED" CONDITION WITH REFERENCES:

Item (10), paragraph 3.3.2 of Procedure WD-1M, Rev 0 requires the WR-6 form to be signed by the rod room attendant at the time of rod issue and prior to any welding in the field.

Contrary to the above, Welder Bishop, T (P35) had just completed a hanger weld at elevation 685', Containment #2 at 1:00 PM without having the WR-6 form signed by the rod room attendant.

AFR SER NO:
M-01-09-0-03

PROJ/DEPT AUDITED:
Bechtel Construction

DATE OF ORIGINATION:
7-1-80

FILE NUMBER:
18.4.3.4

DISTRIBUTION:

WRBird	DATaggart
KLBishop	JLZimmerman
JWC ok	File
T Cooke	RBCherba
JLCorley	PKHansen
LEDavis	EDNewman
LADreisbach	RLRixford
SHHowell	RASimanek
GSKeeley	
BWMarguglio	
JMilandin	
DBMiller	
KORafferty	
JARutgers	

RECOMMENDED CORRECTIVE ACTION:

Rod room attendant should hold WR-6 paperwork until rod is picked up and then sign and release documents to welder.

1. Determine if generic problem exists and take corrective action.
2. Reinstruct rod room attendants in their prescribed duties and document same.

CORRECTIVE ACTION COMMITMENT:

Issued closed. WR6 was immediately signed by the rod room attendant and properly logged in as appropriate.

DATE OF C/A COMPLETION: 7-16-80

DATE OF C/A EFFECTIVENESS: 7-16-80

ORG. RESP FOR C/A:
Bechtel Construction

PERSON MAKING C/A COMMITMENT:
KLBishop

METHOD OF VERIFICATION:

Reviewed letter LAD-1642 and BPCo Training Session Memo #BT-351 dated July 10, 1980.

IS AF REPORTABLE PER 50.55(*): YES NO

IF "YES", DATE OF REPORT TO NRC: NA

IF "YES", TIME OF REPORT TO NRC: NA

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED:

IF "YES", WHO MADE REPORT: NA

NA

AFR ORIGINATOR'S SIGNATURE:
[Signature]

SUPERVISOR'S SIGNATURE:
[Signature] 7/21/80

C/A VERIFICATION SIGNATURE:
[Signature]

VERIFICATION DATE:
16 July 1980



Consumers
Power
Company

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

AS IS" CONDITION VERSUS "AS REQUIRED" / "AS NEEDED" CONDITION WITH REFERENCES:

Paragraph 2.3 of WFMP-1, Rev 3 requires copies of certified materials test reports stating actual test results and identifying the specific test and testing conditions used be provided the jobsite.

Contrary to the above, records for stainless steel covered electrode 3/32 E309-16 Heat #63003, Lot #1248931, AEO #91, PO #F5913, filed in the QC vault does not have test reports (certs) available. This discrepancy is one from six records reviewed.

AFR SER NO:

M-01-09-0-04

PROJ/DEPT AUDITED:

Bechtel Construction

DATE OF ORIGINATION:

7-1-80

FILE NUMBER:

18.4.3.4

DISTRIBUTION:

WRBird	DATaggart
KLBishop	JLZimmerman
JWCook	File
TCCooke	RBCherba
JLCorley	PKHansen
LEDavis	EDNewman
LADreisbach	RLRixford
SHHowell	RASimanek
GSKeeley	
BWMarguglio	
JMilandin	
DBMiller	
KORafferty	
JARutgers	

RECOMMENDED CORRECTIVE ACTION:

1. Withdraw all specific 3/32 E309-16 electrode of this heat number and lot number from storage and issue area until required and correct documentation can be obtained.
2. If documentation is unavailable, further corrective action will be determined at that time.

CORRECTIVE ACTION COMMITMENT:

Corrective action commitment will be provided 14 days after receipt of Audit Report.

DATE OF C/A COMPLETION:

DATE OF C/A EFFECTIVENESS:

ORG. RESP FOR C/A:

Bechtel QC Receiving

PERSON MAKING C/A COMMITMENT:

DADelaney

METHOD OF VERIFICATION:

IS AF ... STABLE PER ... (e):

YES NO

IF "YES", DATE OF REPORT TO NRC:

NA

IF "YES", TIME OF REPORT TO NRC:

NA

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED:

IF "YES", WHO MADE REPORT:

NA

NA

AFR ORIGINATOR'S SIGNATURE:

R.O. Rafferty

SUPERVISOR'S SIGNATURE:

J.A. Early 7/31/80

C/A VERIFICATION SIGNATURE:

VERIFICATION DATE:



Consumers
Power
Company

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

AS IS CONDITION VERSUS "AS REQUIRED" / "AS NEEDED" CONDITION WITH REFERENCES:

Paragraph 7.3, FIW-1.120 requires all forms to be completed legibly in ink.

Paragraph 7.4, FIW-1.120 requires that all rod rooms shall use the same forms and maintain the required records in a neat and timely manner.

Paragraph 7.4.d, FIW-1.120 requires only one heat and lot number of covered electrode for each type and size of weld filler material shall be opened, stored and issued at one time.

Contrary to the above, on 6/27/80, it was observed that rod oven #H031 had 1/8"-E7018 elec ope stored in it and the inventory/storage log indicated that 3/32"-E7018 had been opened and placed in this oven. Further investigation indicated that twice before this date 3/32"-E7018 had been opened and stored in this oven for issue. It was recommended that the rod be destroyed unless by 6/30/80 it could be traced and proven that a certain heat number and lot number was assigned that rod. The rod room attendant stated it would be straightened out or destroyed. On 6/30/80, BPCo Assistant LFWE and CPCo QA were told the 1/8"-E7018 rod had
(See Page 2)

AFR SER NO:

M-01-09-0-05

PROJ/DEPT AUDITED:

Bechtel Construction

DATE OF ORIGINATION:

7/1/80

FILE NUMBER:

18.4.3.4

DISTRIBUTION:

WRBird	DATaggart
KLBishop	JLZimmerman
JWCook	File
TCCooke	RBCherba
JLCorley	PKHansen
LEDavis	EDNewman
LADreisbach	RLRixford
SHHowell	RASimanek
GSKeeley	
BWMarguglio	
JMilandin	
DBMiller	
KORafferty	
JARutgers	

RECOMMENDED CORRECTIVE ACTION:

1. Provide training session for rod room attendant on contents of FIW-1.120 and document same.
2. Provide requirement for rod room attendant to make corrections on existing logs/forms as single line out only with date and initials. No white out should be allowed.
(See Page 2)

CORRECTIVE ACTION COMMITMENT:

Issued closed.

DATE OF C/A COMPLETION: 7-16-80

DATE OF C/A EFFECTIVENESS: 7-16-80

ORG. RESP FOR C/A:

Bechtel Construction

PERSON MAKING C/A COMMITMENT:

KLBishop

METHOD OF VERIFICATION:

Reviewed letter LAD-1642 and BPCo Training Session Memo #BT-351 dated July 10, 1980.

IS AF REPORTABLE PER 30.55(*):

YES NO

IF "YES", DATE OF REPORT TO NRC:

NA

IF "YES", TIME OF REPORT TO NRC:

NA

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED:

IF "YES", WHO MADE REPORT:

NA

NA

FR. ORIGINATOR'S SIGNATURE:

[Signature]

SUPERVISOR'S SIGNATURE:

[Signature] 7/2/80

QUALIFICATION SIGNATURE:

[Signature]

VERIFICATION DATE:

16 July 1980



Consumers
Power
Company

AUDIT FINDING REPORT

PROJECTS, ENGINEERING AND CONSTRUCTION
QUALITY ASSURANCE DEPARTMENT

CONTINUATION SHEET:

"AS IS" CONDITION VERSUS "AS REQUIRED" CONDITION WITH REFERENCES (CONTINUED):

been thrown away and a new lot and heat number of 1/8"-E7018 had been opened and put in oven #H031. On 7/1/80 the BPCo Assistant LFWE and CPCo QA attempted to verify that the old 1/8"-E7018 had been destroyed and new rod had been issued. The rod room attendant stated that the 1/8"-E7018 had not been destroyed, but the log sheet had been changed in a manner to reflect errors previously made in recording heat and lot numbers were now correct. The changes made were not initialed and dated, nor was the log very legible or easily readable.

RECOMMENDED CORRECTIVE ACTION (CONTINUED):

3. Verify the 1/8"-E7018 electrode that was in oven #H031 on 6/27, 6/30 and 7/1 were the same heat and lot number that was placed there prior to that date or is the same as the log indicates now.
4. Verify the 3/32"-E7018 electrode that was originally indicated to be in oven #H031 is the same heat and lot number electrode indicated to be in other ovens by the error addressed in the report.
5. If Items 3 and 4 cannot be accomplished, withdraw and destroy all subject welding electrode.

CORRECTIVE ACTION (CONTINUED):

AFR ORIGINATOR'S SIGNATURE:

SUPERVISOR'S SIGNATURE:

CONSUMERS POWER COMPANY
RECEIVED
JUL 18 1980

FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

Bechtel Power Corporation

Post Office Box 2167
Midland, Michigan 48640

BECHTEL

July 16, 1980

Consumers Power Company
P. O. Box 1963
Midland, MI 48640

Attention: J. L. Corley

Job 7220 Midland Project
CPCo Audit "Bechtel Weld
Rod Control"
Complete Response
LAD-1642

Dear Mr. Corley:

References: (a) AFR M-01-09-0-03
(b) AFR M-01-09-0-05

The above referenced audit findings relate to discrepancies in two areas of the Control of Welding Filler Metal. (a) is a deviation from the use of form WR-6 as per Spec. WD-IM Rev. 0. (b) is a departure from rod control as specified in Field Instruction FIW-1.120 paragraph 7.4(d) as to heat and lot number limitations.

Response to the above and corrective action taken by Mr. K. L. Bishop LFWE is as follows:

- (a) Regarding welder Bishop, T. (P35), who was found to be welding with an unsigned WR-6 rod withdrawal form, the following action has been taken: Instruction has been given by the Lead Field Welding Engineer to all Rod Room Attendants to assure that when there is not an attendant in the rod disbursal trailer, the entrance and exit doors are to be locked; therefore, the welders will have to check with the attendant in rod storage trailer prior to issuance of any filler material to them.
- (b) Regarding the conflict on the filler material inventory/storage log, review of the actual situation by the Lead Field Welding Engineer revealed the following:

JLC	
DRE	
RGW	
HPL	
XPLZ	
FILE	18/34

Mr. J. L. Corley
LAD-1642
Page 2

- A. Weld rod actually contained in oven HO-031 at the present time is Control #TTT which correlates to Heat #422 H 8211, Lot 021G903T. This heat and lot have been stored in oven HO-031 since 6-26-80. Prior to that, from 6-11-80 to 6-26-80, oven HO-031 contained Control #PPP, which correlates to Heat #432C3491, Lot #021S8085.
- B. Weld rod contained in oven HO-035 at the present time is Control #WWW which correlates to Heat #421J2461, Lot #21911001. This heat and lot have been contained in oven HO-035 since 6-20-80. Prior to that, from 6-11-80 to 6-20-80, oven HO-035 contained Control #RRR which correlates to Heat #422E3821, Lot #02-2-A-902P.

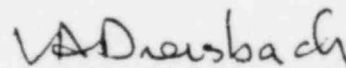
From this review, it can be ascertained that at no time was there any mixture of weld rod types and/or sizes nor was there any loss of traceability of a particular weld rod to its certifications through lack of identification.

The referenced findings, recommended corrective action, along with K. L. Bishop responses and his corrective actions have been reviewed and verified by the Quality Assurance Department.

Appropriate remedial action will be accomplished by a Q.A. monitor of the activities within the weld Rod Control System, at such a time to assure that the specification requirements are maintained.

This is considered to be a complete response to the audit findings as described herein. If there are any questions concerning the above, please contact John Croy of this office.

Very truly yours,



L. A. Dreisbach
Project Quality Assurance
Engineer

LAD/ACM/bss

cc: W. Bird
B. Marguglio
D. Miller

Bechtel Power Corporation

Interoffice Memorandum

To Training Files
Subject Job 7220 Midland Project
Training Session
BT-351
Copies to K. Bishop

File No.
Date July 10, 1980
From J. E. Stubbs
Of Construction
At Midland, MI Ext.

On Wednesday, July 9, 1980, Ken Bishop, Lead Welding Field Engineer, held a 30-minute training session with all rod room attendants in order to clarify and explain all phases of weld rod control.

Items specifically discussed were: The requirements of Specification WFMC-1, Field Procedure FIW-1.120, the need of more stringent control of issuance of weld material to the field personnel and neatness and legibility in making out reports and documentation.

Those in attendance were:

W. Bidwell
D. Roebuck
H. Manno

J. E. Stubbs
J. E. Stubbs

JES/sjc

CONSUMERS POWER COMPANY
RECEIVED
JUL 18 1980
FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN



Consumers
Power
Company

PROJECTS, ENGINEERING AND CONSTRUCTION -
QUALITY ASSURANCE DEPARTMENT

AUDIT FINDING REPORT

"AS IS" CONDITION VERSUS "AS REQUIRED" / "AS NEEDED" CONDITION WITH REFERENCES:

ASME Section III 1974 Edition subsubarticle NC-5380 delineates the acceptance standard for soap bubble testing. Contrary to this requirement, Graver Tank's vacuum box testing procedure VBT-i2 Rev. 0, reference paragraph 4.3 does not meet the required time period for vacuum retention.

AFR SER NO:

4-01-02-0-02

PROJ/DEPT AUDITED:

Graver Tank

DATE OF ORIGINATION:

2-6-80

FILE NUMBER:

18.4.7

DISTRIBUTION:

ACTION: LADriesbach
WRBird JARutgers
TCCooke DATaggart
JLCorley BKWarren
LEDavis JLWood
SHHowell JWCook
GSKeeley
BWMarguglio
DKMartin
JMilandin
DBMiller
ROstrowski
DPattee
KORafferty

RECOMMENDED CORRECTIVE ACTION:

1. Revise procedure to meet appropriate requirements.
2. Reaccomplish vacuum box tests previously completed. Re-tests are to be accomplished to required reference of the ASME Boiler and Pressure Vessel Code, 1974 edition.

CORRECTIVE ACTION COMMITMENT:

A deviation request will be submitted to Bechtel for approval.

DATE OF C/A COMPLETION: 2-6-80

ORG. RESP FOR C/A:

Graver Tank

PERSON MAKING C/A COMMITMENT:

BKWarren

DATE OF C/A EFFECTIVENESS: 2-21-80

METHOD OF VERIFICATION:

Reviewed Bechtel letter LAD-1639. Verified approval of SDDR 80-03.
Reviewed Procedure VBT-12 Rev 1 to confirm changes as requested by SDDR-80-03 were incorporated and approved.

IS AF REPORTABLE PER 20.55(4)?

YES NO

IF "YES", DATE OF REPORT TO NRC:

NA

IF "YES", TIME OF REPORT TO NRC:

NA

IF "YES", NAME OF NRC OFFICIAL TO WHOM REPORTED:

IF "YES", WHO MADE REPORT:

NA

NA

AFR ORIGINATOR'S SIGNATURE:

R. Stumli

SUPERVISOR'S SIGNATURE:

J. Corley 2/25/80

C/A VERIFICATION SIGNATURE:

Donald K. Martin

VERIFICATION DATE:

17 July 1980

CORRECTIVE ACTION REPORT

① Unit S/U System Discip Serial
 0 - B L A - M - 004

② Description of Deficiency Utility Makeup Water
 Clean resin sluice pipe #2"-OHCD-916 at P&ID location B-3 should tap off downstream of vent valve 449-1-095 and is a 3" pipe vice 2" pipe as stated on F&ID 449 sh 1A.

(✓) Con't on Attachment

③ Recommended Corrective Action and Retest
 RESOLVE P&ID WITH "AS-BUILT" CONDITION

(✓) Con't on Attachment

④ Related Documents and References
 M-449 sh 1A Rev 1
 D-MLD-80-60

<input checked="" type="checkbox"/> Deficiency <input type="checkbox"/> Design Chg <input type="checkbox"/> Troubleshoot <input type="checkbox"/> Maintenance <input type="checkbox"/> Retest Only	⑤	⑥ Initial B, P, C	⑦ Cause 0, 2	NRC Reportability 10CFR50.55e <input checked="" type="checkbox"/> Not Reportable <input type="checkbox"/> Reportable; QA Notified Name: <u>AKayih</u> Time/Dat: <u>7-21-80</u>	⑧
	A Subseqnt	Category 05	Retest Req <input type="checkbox"/>		

⑩ Corrective Action or Response:

Action Organization Representative
 Date

CONSUMERS POWER COMPANY
RECEIVED
 AUG 5 1980
 FIELD QUALITY ASSURANCE
 MIDLAND, MICHIGAN

(✓) Con't on Attachment

⑪ Retest Complete	Date
TE:	
Completion Review Signature	Date
QA:	
FE/TE:	
PS/PTS:	

CORRECTIVE ACTION REPORT

① 0 - DCA - I - 002

② Description of Deficiency

Reference 1 Contains Following Errors

- A) The Setpoint For OXDSH-1801B & OXDSH-1811B IS Listed As 10 Inches Of H₂O D/P. The Annunciator, OXDAH-1801, To Which Both Switches Are Connected HAS A Setpoint Of 12 Inches H₂O D/P. According To Reference 3, The Setpoint Should Be 12 Inches.
- B) Ref. 1 Lists Two Differential Level Alarms, OXDAH-1801 And OXDAH-1811, Ref 3 & Ref 4 Show Only One Alarm OXDAH-1801

(v) Con't on Attachment

③ Recommended Corrective Action and Retest

Evaluate and Correct Documentation As Required.

(v) Con't on Attachment

④ Related Documents and References

- 1) J-700 Instrument Index Rev. 10
- 2) 7220-M20-7-8 Water Screen Schematic Diagram
- 3) M-418-B Rev 0 S.W. Cooling Tower & Pump Structure
- 4) 7220-M20-3-6 Control Panel Layout

<input checked="" type="checkbox"/> Deficiency	⑤	⑥ Initial	⑦ Cause	NRC Reportability 10CFR50.55e
<input type="checkbox"/> Design Chg		B, P, D	0, 3	<input checked="" type="checkbox"/> Not Reportable
<input type="checkbox"/> Troubleshoot		A Subseqnt	Category	<input type="checkbox"/> Reportable; QA Notified
<input type="checkbox"/> Maintenance		C, P, Q	0, 2	Name: <u>M.F. Bughoff</u> Date: <u>12/20</u>
<input type="checkbox"/> Retest Only			<input type="checkbox"/> Retest Req	⑨ Signature
			<input checked="" type="checkbox"/> Q-Listed	Orig: <u>Don C. McIntyre</u> Date: <u>12/15/79</u> Time: <u>1750</u>
				FE/TE: <u>M.F. Bughoff</u> Date: <u>12/27/79</u> Time: <u>0846</u>
				PS/PTS: <u>Paul K. Walley</u> Date: <u>12/21/79</u> Time: <u>1200</u>

⑩ Corrective Action or Response:

PROJECT ENGINEERING HAS CORRECTED TENS C: D OF BOOK ② AS PART OF REV 11 TO J-700 ②, AND WILL INCORPORATE THE CHANGE DESCRIBED IN BOOK ② FOR ITEMS A & B AS PART OF THE NEXT REVISION OF J-700 ②.

Jim Clinton 1/7/80
Action Organization Representative
P. C. ... Date 1/7/80

RE NOTE: AAO CONTACT
G. STANKIEWICZ & D. HANEXAMP 1/7/80
Changes incorporated in Rev 14 J-700

(v) Con't on Attachment

⑪ Retest Complete	Date
TE: <u>N/A</u>	
Completion Review Signature	Date
QA: <u>[Signature]</u>	<u>7-177</u>
TE: <u>M.F. Bughoff</u>	<u>3/17/80</u>
PS/PTS: <u>[Signature]</u>	

C.) Ref. 1 Lists Four Reset Timers, OKY-1801A, OKY-1801B, OKY-1811A, and OKY-1811B. Ref 3 Shows The Same Timers As OKY-1801, OKY-1802, OKY-1811, And OKY-1812. Ref. 2 Supports Ref. 3 By Identifying Two Of The Timers As OKY-1801 And OKY-1811.

D.) Ref. 1 Lists One Stopped Motion Detector OXE-1812 And Two Stopped Motion Alarms OXA-1802 And OXA-1812. Ref. 3 Shows Two Stopped Motion Detectors OXE-1802 And OXE-1812 And One Stopped Motion Alarm OXA-1802. Ref. 2 Supports Ref. 3.

2) Description of Deficiency

The logic diagram for the Service Water pumps (J-45 sh3) indicates that the setpoint for OPH 1826 F1+F2 is 75 PSIG but J-700 indicates that the setpoint for these instruments is 70 PSIG

(V) Con't on Attachment

3) Recommended Corrective Action and Retest

Determine which document is correct and change the appropriate drawing(s)

(V) Con't on Attachment

4) Related Documents and References

J-45 sh3 Rev 2
J-700 Rev 11

- Deficiency
- Design Chg
- Troubleshoot
- Maintenance
- Retest Only

5) Initial
B.P.D
Subseqnt
C.P.C
C.P.Q
A
C
T
I
O
N

7) Cause
4.0
Category
5.0
Retest Req
 Q-Listed

8) NRC Reportability 10CFR50.55e
 Not Reportable
 Reportable; QA Notified
Name Date

9) Signature Date Time
Orig: *MT Berghoff* 1/18/80 1040
FE/TE: *MT Berghoff* 1/22/80 1050
PS/PTS: *Paul H. Welby* 1-17-72/200

10) Corrective Action or Response:

PROJECT ENGINEERING WILL INCORPORATE THE CHANGE DESCRIBED IN BLOCK 2 AS PART OF THE NEXT REVISION OF J-700.

RECEIVED BY

RE NOTE AAO CONTACT

BILL EISENBERG 2-25-80 JAN 21 1980

Changes incorporated in Rev 14 J-700 set
RESIDENT ENGINEER

(V) Con't on Attachment

Jm Ch... 2-25-80
Action Organization Representative
P. Curran Date 2/26/80

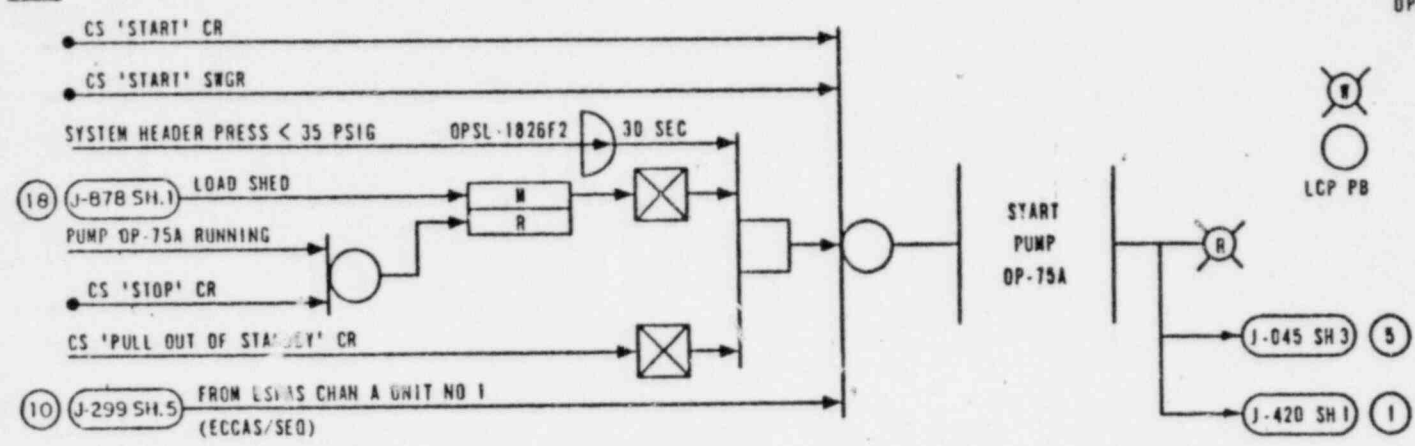
11) Retest Complete Date
TE: NA
Completion Review Signature: Date
QA: *[Signature]* 7-17-80
FE: *MT Berghoff* 5/6/80
PS/PTS: *[Signature]*

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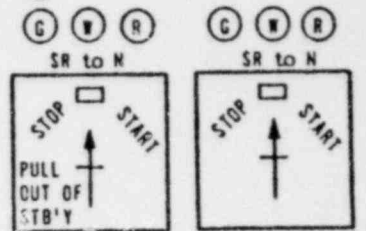
12/17/76 REVISED AS SHOWN
 1-2 REVISED AND REDRAWN AS INDICATED
 0 6-27-75 ISSUED FOR CONSTRUCTION

PUMP EQUIPMENT NO	CS LOCATIONS		SYSTEM HEADER PRESS SW NUMBERS		ESFAS CHAN	LOAD GROUP		STATUS LIGHT LOCATION	COMPUTER I/O NUMBERS			ESFAS CONTINUATION BUBBLE
	CR	SWGR				UNIT	NO					
OP-75A	OC10	1A05	OPSL-1826F2	OPSH-1826F2	UNIT NO 1 A	NO 1	I	1C14	Z260	P252	P253	(P)
OP-75B	OC10	1A06	OPSL-1826G1	OPSH-1826G1	UNIT NO 1 B	NO 1	II	1C14	Z261	P251	P254	(P)
OP-75C	OC10	2A05	OPSL-1826F1	OPSH-1826F1	UNIT NO 2 A	NO 2	I	2C14	Z262	P252	P253	(P)
OP-75D	OC10	2A06	OPSL-1826G2	OPSH-1826G2	UNIT NO 2 B	NO 2	II	2C14	Z263	P251	P254	(P)

START



VENT VLV OPEN



NOT BYPASSED
ACTUATED
CR LOP STATUS
CR ECCAS STATUS

NOTES

- FOR REFERENCE SEE W-418, E-186, E-185.
- CS 'PULL OUT OF STANDBY' CR WILL PREVENT AUTO START ON LOW WATER LEVEL BECAUSE

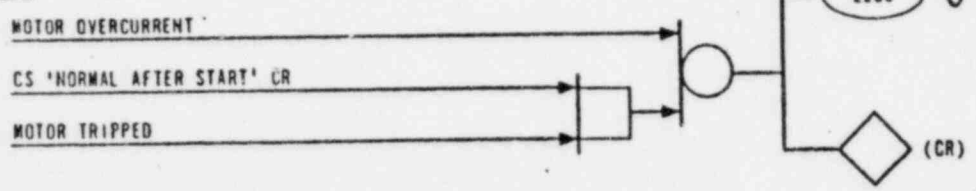
FOR INFORMATION ONLY

RECEIVED

DEC 27 1976

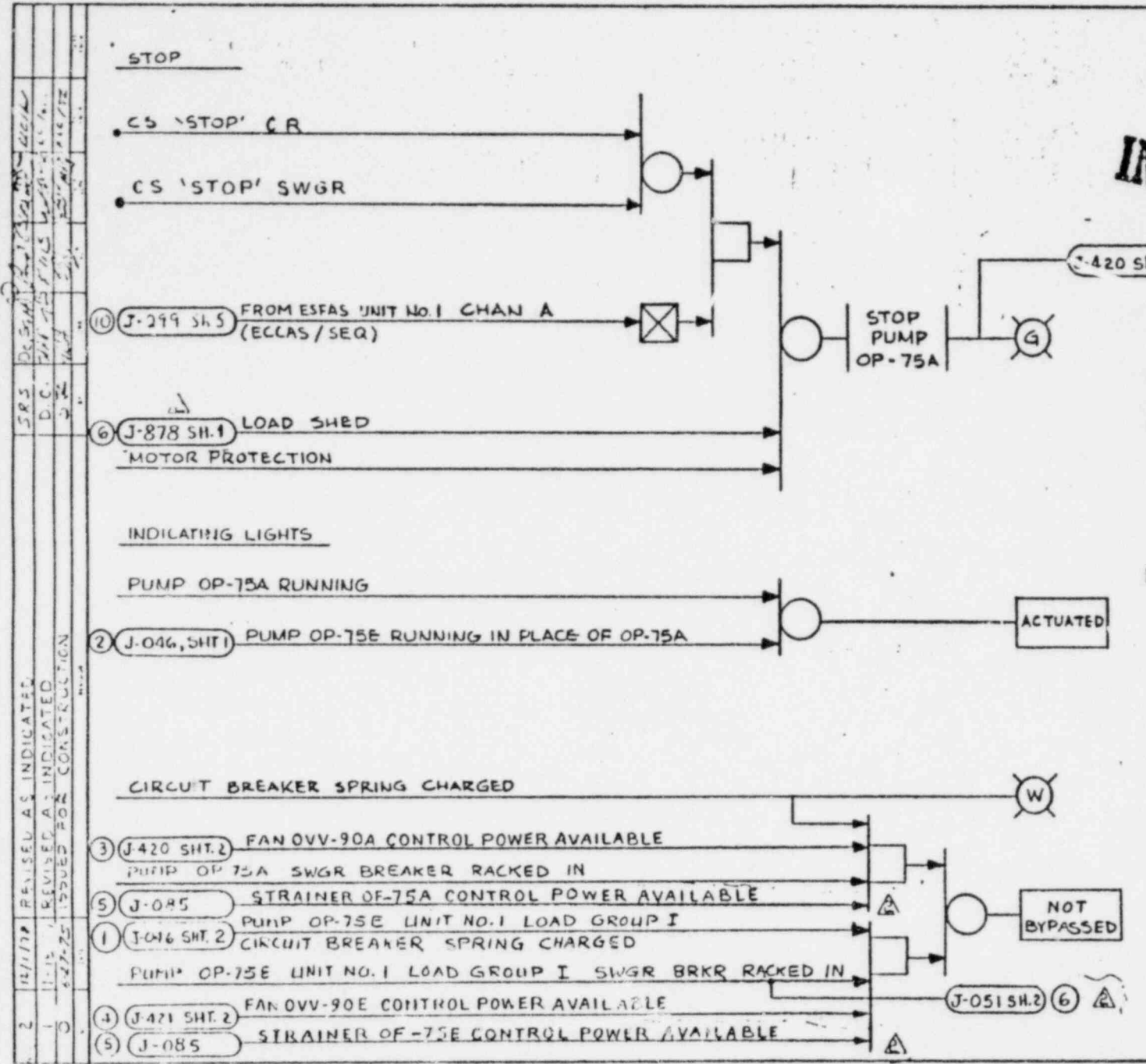
BECHTEL POWER CORP.
JOB 7220
PER *J.S.*

ALARM



BECHTEL ANN ARBOR, MICHIGAN	
MIDLAND PLANT UNITS 1 & 2 CONSUMERS POWER COMPANY	
LOGIC DIAGRAM SERVICE WATER PUMP	
JOB No. 7220	DRAWING No. J-045(0) SH 1 OF 3

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**FOR
INFORMATION ONLY**

RECEIVED

DEC 27 1978

BECHTEL POWER CORP.
JOB 7220
PER J.S.

BECHTEL ANN ARBOR, MICHIGAN		
MIDLAND PLANT UNITS 1 & 2 CONSUMERS POWER COMPANY		
LOGIC DIAGRAM SERVICE WATER PUMP SHEET 2 OF 3		
	JOB No. 7220	DRAWING No. J-045 (Q)
		REV. 2

② Description of Deficiency

Discrepancy between P&ID and loop diagram. Loop Diagram J-365-2 shows a loop consisting of OMT 6578 A/B, OMC 6578 A/B and OMY 6506 A/B. P&ID M465-1 shows a loop consisting of OME 6506 A, OMC 6506 A/B, OMY 6506 A/B and OMSH 6506 A/B. Instrument Index J-70 lists no instrument numbers for OMT 6578 A/B and OMC 6578 A/B.

Roger Smith 5-25-79 0858

(V) Con't on Attachment

③ Recommended Corrective Action and Retest

Investigate and determine correct loop diagram and change either P&ID, Loop Diagram or Instrument Index to reflect change.

(V) Con't on Attachment

④ Related Documents and References

Instrument Index J-700 Rev 8 PW
 P&ID M465-1 Rev 3
 Loop Diagram J-365-2 Rev 2

<input checked="" type="checkbox"/> Deficiency <input type="checkbox"/> Design Chg <input type="checkbox"/> Troubleshoot <input type="checkbox"/> Maintenance <input type="checkbox"/> Retest Only	⑤	⑥ Initial	⑦ Cause	NRC Reportability 10CFR50.55e	⑧
		B.P.O	03	<input checked="" type="checkbox"/> Not Reportable	Paul K. Whelan 4/24/79
		A Subseqnt	Category	<input type="checkbox"/> Reportable; QA Notified	Name Date
		C L.P.C	05		
		T C.P.C			
	I C.P.C	<input type="checkbox"/> Retest Req		⑨ Signature	Date Time
	O C.P.C	<input checked="" type="checkbox"/> Q-Listed		Orig: C.F. Gendall	5/25/79 0858
	N C.P.C			FE/TE: G.M. Evans	9/13/79 C.F.T.
				PS/PTS: Paul K. Whelan	65/17/1200

⑩ Corrective Action or Response:

PROJECT ENGINEERING WILL REVISE THE LOOP DIAGRAM, P&ID AND INSTRUMENT INDEX TO CORRESPOND AS PART OF THE NEXT REVISION OF EACH DOCUMENT

J.M. Clinton 9-18-79
 Action Organization Representative
 R. Bainschi Date 9-18-79

RE NOTE AAO CONTACT Revised in
 R. KENDRICK / F. DAVIS 2/14/80

⑪ Retest Complete	Date
TE: NA	
Completion Review Signature	Date
QA: [Signature]	7-17-
TE: G.M. Evans	3/13/80
PS/PTS: [Signature]	1/1/80

(V) Con't on Attachment

X

CORRECTIVE ACTION REPORT

Page of

Unit 0 - S/U System E1A1A - Discip M - Serial 1266

2 Description

DURING SYSTEM CHECK OUT TESTING SERVICE WATER PUMP OPERATED FAILED TO DEMONSTRATE DESIGN PERFORMANCE OF 20500 GPM AT 133 FT TDH.

MEASURED PERFORMANCE DURING TEST AT THE DESIGN POINT WAS APPROXIMATELY 123 FT AT 20500 GPM

(v) Contd on Attachment

3 Recommended Corrective Action and Retest

INSPECT PUMP SWIRLERS BUILT AREA FOR PROBLEMS
RETEST & SUBSEQUENT CORRECTIVE ACTION TO BE DETERMINED FROM INSPECTION OF PUMP.

Due Date 073080

(v) Contd on Attachment

4 Related Documents and References

INSTRUCTION MANUAL 7220-M75-56-4
MARKED CURVE SHOWING AS INSTALLED TEST RESULTS

5 Deficiency

Design Chg

Troubleshoot

Maintenance

Retest Only

6 Initial C.P.T.

Subsequent

A
C
T
I
O
N

7 Category 015

Cause 110

Retest Reqd Yes No

Q-Listed Yes No

8 NRC Reportability 10 CFR 50.55(e)

Not Reportable L.P. Leakdown

Reportable; QA Notified _____

Signature	Date	Time
Orig: <u>L.P. Leakdown</u>	<u>7/24/80</u>	<u>07:30</u>
EE/TE: <u>[Signature]</u> CER	<u>7/24/80</u>	<u>07:55</u>
PS/PTS: <u>[Signature]</u>	<u>7/24/80</u>	<u>1300</u>

10 Corrective Action or Response:

Action Organization Representative _____
Date _____

CONSUMERS POWER COMPANY

RECEIVED

JUL 24 1980

FIELD QUALITY ASSURANCE
MIDLAND, MICHIGAN

11 Retest Complete	Date
TE: _____	
Completion Review Signature	
QA: _____	
FE/TE: _____	
PS/PTS: _____	

(v) Contd on Attachment

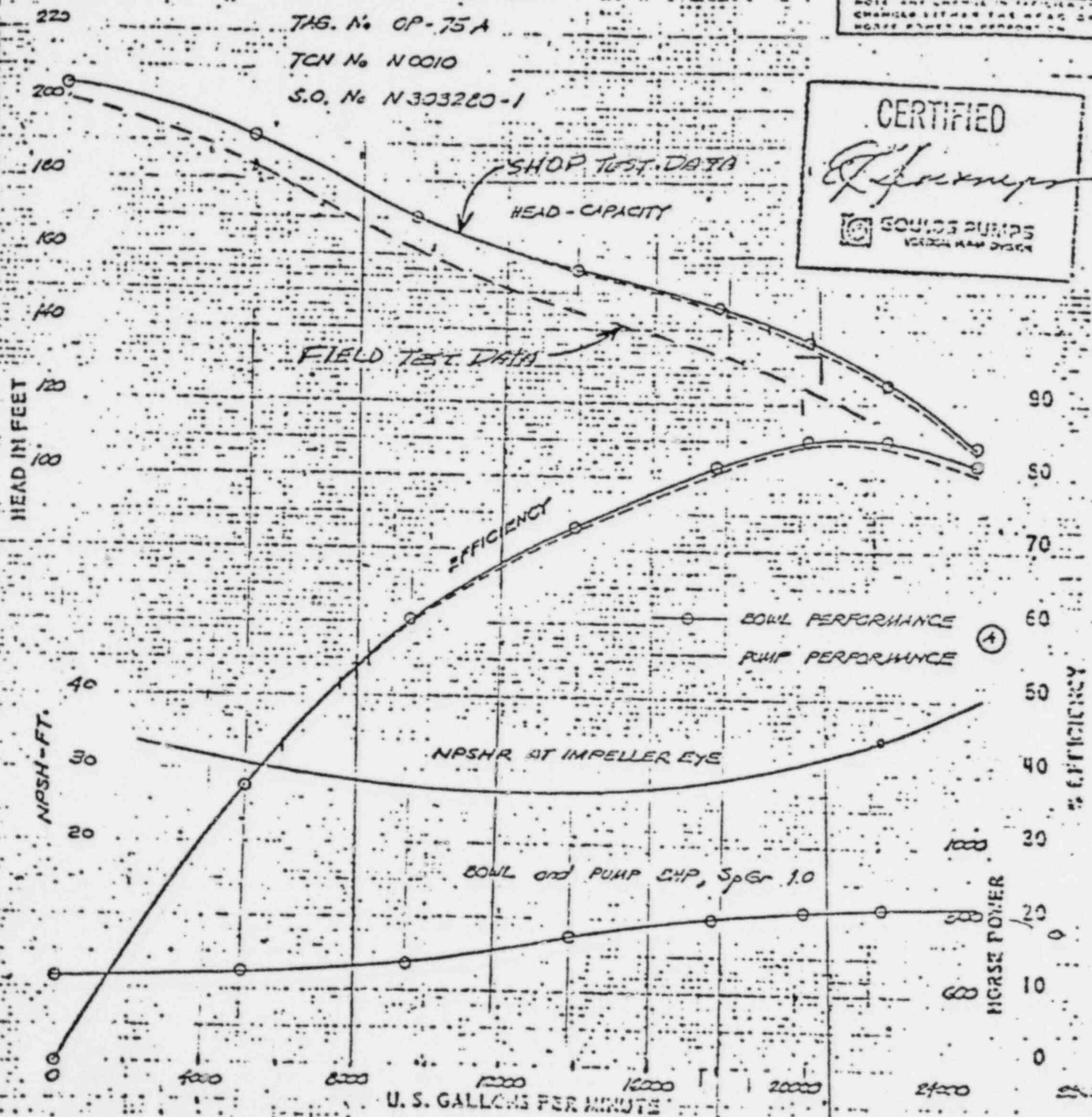
CURVE SHOW APPROXIMATELY THE CHARACTERISTICS WHEN PUMPING CLEAN NON-AL. TATED WATER. NO GUARANTEE IS MADE EXCEPT FOR THE RATED POINT.

NOTE: COLUMN LOSSES ARE INCLUDED

CONSUMERS POWER CO., MIDLAND UNIT 1 & 2
 BECHTEL POWER CORP.
 P.O. No. 7220-M-75-AG
 TAG. No. CP-75A
 TCN No. N0010
 S.O. No. N303200-1

CHANGE EFFICIENCY AS FOLLOWS	NUMBER OF POINTS	PER NUMBER OF STAGES

NOTE: CHANGE EITHER THE HEAD OR HORSE POWER IN ACCORDANCE WITH THE ABOVE TABLE.



IMPELLER CLOSED
 26 1/4" DIA.
 UP AND

SOULDS PUMPS
 VERTICAL PUMP DIVISION

PERFORMANCE ONE STAGE

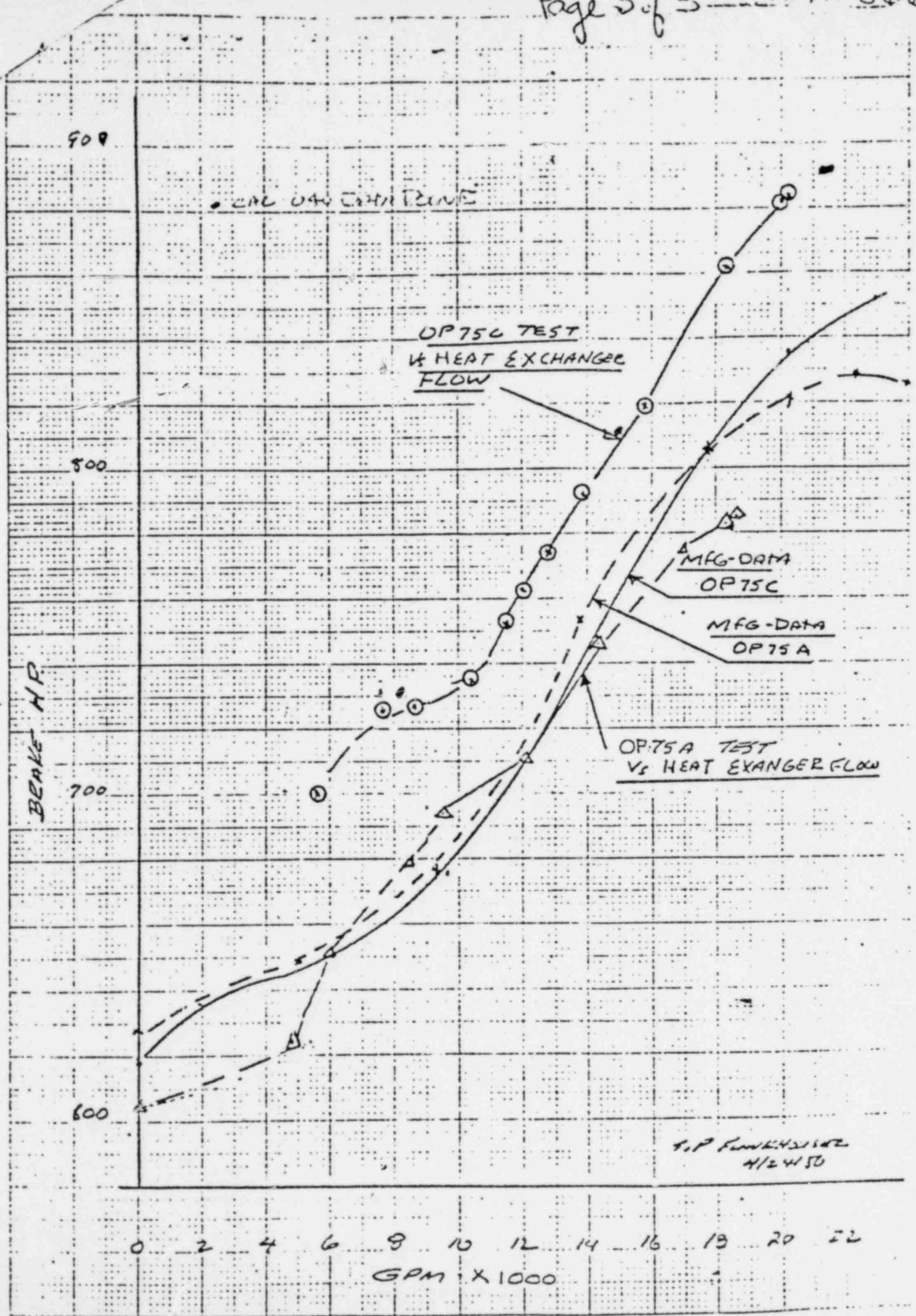
50X-3G DHC

DEEP WELL TURBINE PUMP

880

B.P.M.

HPD 02912
11-2 0147
7-1-50



T.P. FUNKHUISER
4/24/50

CORRECTIVE ACTION REPORT

QA

① 1-BCA-I-010

② Description of Deficiency

THE NAMEPLATE FOR DHR PUMP 1D-60A/B TEST FLOW INDICATOR IFI-1051 READS INCORRECTLY (eg. form instead of flow).

(✓) Con't on Attachment

③ Recommended Corrective Action and Retest

REPLACE NAMEPLATE WITH ONE READING IN ACCORDANCE WITH NP-J-730 PAGE 3 NAMEPLATE No. 1C014-C13A

(✓) Con't on Attachment

④ Related Documents and References

NP-J-730 REV 1 NAMEPLATE LIST FOR CONTROL BOARD 1C14

Deficiency ⑤

- Design Chg
- Troubleshoot
- Maintenance
- Retest Only

⑥ Initial

B.P.C

A Subseqnt

C.P.C

C.P.Q

O

N

⑦ Cause

.01

Category

.02

Retest Req

Q-Listed

NRC Reportability 10CFR50.55e

Not Reportable

Reportable; QA Notified

Name Date

⑨ Signature

Orig: S.A. Chubb

FE/TE: [Signature]

PS/PTS: [Signature]

Date Time

09-70 1300

9-4-79 0955

8/3/77 11:00

⑩ Corrective Action or Response:

New Name plate has been installed as stated in Block # 3 above.

Complete 5/22/80
Ronald Hienkle

Action Organization Representative

[Signature] Date 5/22/80

⑪ Retest Complete	Date
TE: [Signature]	
Completion Review Signature	Date
QA: [Signature]	5/22/80
FE: [Signature]	7/18/80
PS/PTS: [Signature]	5/21/80

(✓) Con't on Attachment